

### Meeting Purpose

- Update Christine regarding EPA Assistance and TMDL Resubmit Progress
- Discuss options for moving forward in light of Puget Sound FOIA and HQ review

### Project Background

Ecology submitted the final Phase 1 Deschutes TMDL to EPA for approval on December 17, 2015. The submitted TMDL package included a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment).

Ex. 5 - Deliberative Process

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

## Ex. 5 - Deliberative Process

### Recommendation

## Ex. 5 - Deliberative Process

### Options for Moving Forward

40 CFR 130.7(d)(2): *“The Regional Administrator shall either approve or disapprove such listing and loadings not later than 30 days after the date of submission....”*

## Ex. 5 - Deliberative Process

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REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)

Summary of TMDL Issues and Viewpoints

# Ex. 5 - Deliberative Process

Deschutes TMDL (WA) Resubmit Letter

Correspondence Objectives

- 1.
- 2.

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

Correspondence Considerations and Components

**Ex. 5 - Deliberative Process**

Questions

**Ex. 5 - Deliberative Process**

Deschutes WQLS Groups by Resolution Pathway and Mechanisms

**Ex. 5 - Deliberative Process**

# **Ex. 5 - Deliberative Process**

**Table 1. Water Quality Limited Segments Submitted for Approval in Deschutes TMDL**

Waterbody	2012 (2014) Listing ID	Pollutant	Resolution Group	Comments
Adams Creek	45462	Bacteria	B	-----
	45695	Bacteria	B	-----
	50965	pH	D	-----
Butler Creek	45471	Bacteria	B	-----
Butler Creek, SW F	45342	Bacteria	B	-----
Ellis Creek	45480	Bacteria	B	-----
Indian Creek	3758	Bacteria	B	-----
	45213	Bacteria	B	-----
	46410	Bacteria	B	-----
	74218	Bacteria	B	-----
Mission Creek	45212	Bacteria	B	-----
	46102	Bacteria	B	-----
Moxie Creek	3759	Bacteria	B	-----
	3761	Bacteria	B	-----
	45252	Bacteria	B	-----
	46432	Bacteria	B	-----
Schneider Creek	45559	Bacteria	B	-----
Ayer (Elwanger) Creek	5849	Bacteria	B	-----
	5850	pH	D	-----
	5851	Dissolved Oxygen	D	-----
	73229	Temperature	D	-----
Chambers Creek	45560	Bacteria	B	-----
Deschutes River	46499	Bacteria	B	-----
	46500	Bacteria	B	-----
	9881	Bacteria	B	-----
	46210	Bacteria	B	-----
	10894	Dissolved Oxygen	C	-----
	47753	Dissolved Oxygen	C	-----
	47754	Dissolved Oxygen	C	-----
	47756	Dissolved Oxygen	C	-----
	6576	Temperature	B	Confirm Below Offutt Lake with Ecology
	7590	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	48710	Temperature	B	Confirm Below Offutt Lake with Ecology
	48711	Temperature	B	Confirm Below Offutt Lake with Ecology
	48712	Temperature	B	Confirm Below Offutt Lake with Ecology
	48713	Temperature	B	Confirm Below Offutt Lake with Ecology
	48714	Temperature	B	Confirm Below Offutt Lake with Ecology
	48715	Temperature	B	Confirm Below Offutt Lake with Ecology
	48717	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	48718	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	9439	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	7588	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	7592	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	7593	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	7595	Temperature	B	Confirm Below Offutt Lake with Ecology
	48720	Temperature	B	Confirm Below Offutt Lake with Ecology
	48721	Temperature	B	Confirm Below Offutt Lake with Ecology
	48724	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	48726	Temperature	B	Confirm Below Offutt Lake with Ecology
	6232	Fine Sediment	A	-----
Huckleberry Creek	3757	Temperature	D	-----
Lake Lawrence Creek	47696	Dissolved Oxygen	D	-----
Reichel Creek	3763	Bacteria	B	-----
	45566	Bacteria	B	-----
	47714	Dissolved Oxygen	D	-----
	48666	Temperature	D	-----
Spurgeon Creek	46061	Bacteria	B	-----
Tempo Lake Outlet	48696	Temperature	D	-----
Unnamed Spring to Deschutes River	48923	Temperature	D	-----
Black Lake Ditch	47761	Dissolved Oxygen	D	-----
	47762	Dissolved Oxygen	D	-----
	50990	pH	D	-----
	48733	Temperature	B	Maybe A? Applies NCC
	48734	Temperature	B	Maybe A? Applies NCC
	48735	Temperature	B	Maybe A? Applies NCC
Percival Creek	46103	Bacteria	B	-----
	46108	Bacteria	B	-----
	48085	Dissolved Oxygen	C	Applies NCC*
	48086	Dissolved Oxygen	C	Applies NCC*
	42321	Temperature	B	Maybe A? Applies NCC
	48249	Temperature	B	Maybe A? Applies NCC
	48727	Temperature	B	Maybe A? Applies NCC
	48729	Temperature	B	Maybe A? Applies NCC

\*In addition to applying the NCC, this TMDL does not include a linkage analysis and uses shade as a DO surrogate

## Meeting Purpose

- Actions for moving forward with the Deschutes TMDL
- Summary of TMDL issues and Agency viewpoints
- Review Path Forward Discussed with Ecology during 1/10/2017 meeting in Lacey, WA

## Project Background

Ecology submitted the final Phase 1 Deschutes TMDL to EPA for approval on December 17, 2015. The submitted TMDL package included a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment).

Ex. 5 - Deliberative Process

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## Actions for Moving Forward

40 CFR 130.7(d)(2): “The Regional Administrator shall either approve or disapprove such listing and loadings not later than 30 days after the date of submission...”

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REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)

Summary of TMDL Issues and Viewpoints

# Ex. 5 - Deliberative Process

**A Path Forward**

EPA (CZ, DC) and Ecology (SWRO) met on 1/10/2017 in Lacey, WA to discuss a path forward.

Ex. 5 - Deliberative Process

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## REGION 10 OWW TOPIC BRIEFING

### TRIBAL CONSULTATION AND REVIEW UPDATE FOR DESCHUTES TOTAL MAXIMUM DAILY LOAD (TMDL), THURSTON & LEWIS COUNTIES, WASHINGTON

#### Meeting Purpose

Provide background information and discuss with Dan the following:

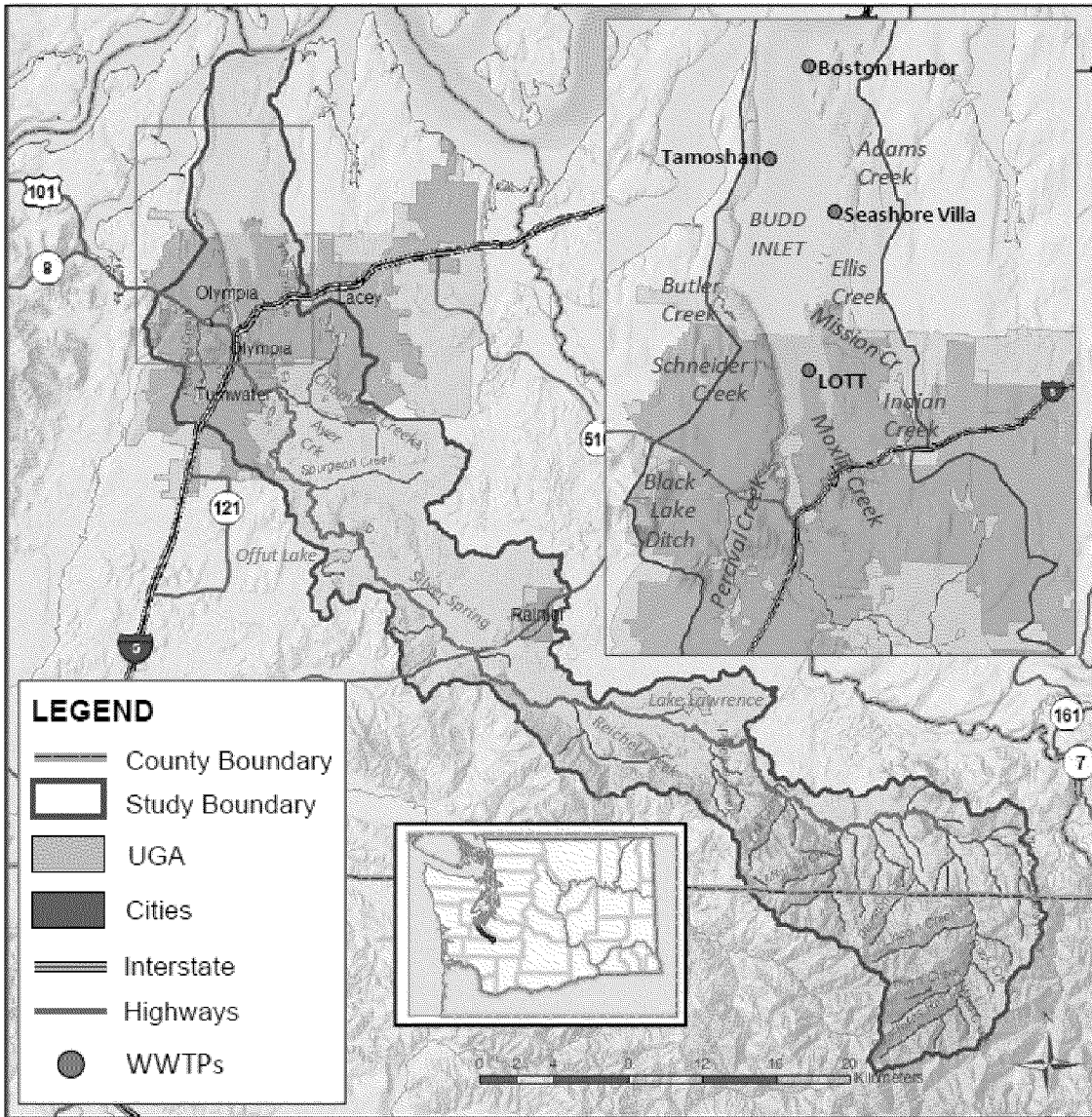
- Overall Status of EPA Watershed Unit Review;
- Discussions with NWEA;
- Tribal Consultation Outcomes;
- Ecology Regional Office Position and EPA Evaluation;

- **Ex. 5 - Deliberative Process**
- Options for Moving Forward

#### Project Background

The Deschutes River, Percival Creek, and Budd Inlet Tributaries (Phase 1) TMDL study area (186 mi<sup>2</sup>) is located in south Puget Sound and is situated within the boundaries of Thurston and Lewis Counties, Washington (**Figure 1**). The study area includes the major cities or towns of Olympia, Lacey, Tumwater, and Rainier. Significant data collection to support the Phase 1 TMDL began in 2003. Data analysis and modeling concluded in 2012. On December 17, 2015, Ecology submitted the final Phase 1 TMDL to EPA for approval. The submitted TMDL package includes a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment). EPA understands that Ecology is developing a TMDL for Budd Inlet and Capitol Lake as Phase 2 of the Deschutes TMDL.

## Ex. 5 - Deliberative Process



**Figure 1.** Study Area for Deschutes TMDLs

### Quick Summary

- ✓ Ecology is seeking approval for TMDLs that span 71 segments
- ✓ Category 5 impairments: water temperature, DO, pH, fecal coliform bacteria, and fine sediment
- ✓ Category 4C pollution: in-stream flows and large woody debris
- ✓ TMDL split into two phases given technical complexity and political ramifications related to Capitol Lake and Budd Inlet impairments. Complexities include Capitol Lake as a source of low DO to South Sound and nutrient reductions from stormwater sources to address Capitol Lake phosphorus impairment

- ✓ Surrogates are proposed for 4 of 5 pollutants
- ✓ The TMDL seeks to achieve temperature, DO, and pH water quality standards through increased stream shading
- ✓ Ecology predicts that WQS for temperature, DO, and pH will be achieved by 2065.
- ✓ Permittees include: 5 municipal stormwater-MS4s, 7 sand & gravel, 9 industrial stormwater, and 25+ construction stormwater. The boundary of the Phase 1 TMDL does not include wastewater treatment point sources. Phase 2 of the TMDL will include the LOTT regional wastewater facility that serves south Puget Sound.

## Ex. 5 - Deliberative Process

### Status of Watershed Unit Review

Given the complexity of the Phase 1 TMDL, 6 members of the watershed unit participated in the initial review of the TMDL in February 2016.

### Ex. 5 - Deliberative Process

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### **NWEA Concerns**

SWRO (Andrew) scheduled a meeting with Nina Bell on August 2, 2016 in Portland, OR (at OR Ops office) to obtain NWEA feedback on the Deschutes TMDL as she had indicated unspecified concerns with the TMDL in previous discussions. Laurie and Chris participated in the meeting at the request of Ecology. Overall, Nina expressed an unfavorable opinion of the TMDL and summarized that the TMDL will not change or improve existing conditions. Nina did offer a potential ‘carve-out’ from the NCC remand for temperature segments of the Deschutes if buffer requirements were more detailed and were placed into the load capacity/allocation section of the TMDL. Nina explained the DO segments (and maybe pH by reference) of the TMDL were too problematic/flawed and should not move forward (no ‘carve-out’). Appendix A summarizes TMDL related concerns expressed by NWEA.

## Ex. 5 - Deliberative Process

In addition, SIT included the following in their public notice comments:

“The Clean Water Act does not allow Ecology to draw a bright line between its water quality and quantity programs. Rather, the Act requires “comprehensive solutions” to prevent, reduce and eliminate pollution in concert with programs for managing water; and (2) establishes the supreme goal of restoring and maintaining the chemical, physical, and biological integrity of the Nation’s waters. Drawing a bright line is a prohibited “artificial distinction.” PUD No. 1 v. Ecology, 511 U.S. 700, 719 (1994).”

EPA and Ecology met with SIT during a tribal coordination meeting on 6/30/2016 in Lacey, WA. Issues described above were discussed. An outcome of the meeting was a promised response to SIT from Ecology regarding minimum stream flows by the end of July 2016. The WU was not copied in any response by Ecology to SIT regarding this TMDL.

## Ex. 5 - Deliberative Process

Ecology Regional Office Position and EPA Evaluation

## Ex. 5 - Deliberative Process

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## TMDL held in Portland, OR on 8/2/2016.

What follows is an itemized list of key statements expressed by Ecology, NWEA, and EPA. Notes in native, uncondensed form are available. It should be mentioned that NWEA appears to have constructed a bulleted list of TMDL issues that consists of about 30-50 comments on it. Maybe one-third of those comments were shared during the meeting on 8/2/2016.

NWEA	Ecology	EPA
<ul style="list-style-type: none"> <li>(1) Unconvinced that TMDL will change existing water quality conditions.</li> <li>(2) Downstream waters not protected (self-stated). Failing to protect DS waters is a big deal. TMDL is kind of a shell because it does not deal with DS waters or tributaries.</li> <li>(3) Buffers show up in implementation rather than allocation section.</li> <li>(4) Need to convert shade values into real, implementable surrogates. How was 75 ft. buffer determined? Vertical and areal density is important. What is mature vegetation?</li> <li>(5) The entire TMDL seems to be a surrogate. Suite of shade surrogates may be needed. Why was channel width not allocated as it was part of NCC demonstration.</li> <li>(6) Compliance with permit seems to be compliance with TMDL as WLAs are mostly existing permit conditions or restated WQS. WLAs do not seem to add value.</li> <li>(7) Using shade as surrogate for parameters other than temperature creates holes.</li> <li>(8) TMDL does not assess if current landuse practices, such as forestry, contribute to sediment impairments.</li> <li>(9) Reasonable Assurance section is inconsistent. Should consider actions that are not already occurring. Deferring to Fish and Forest assurances is a problem.</li> <li>(10) TMDL cites nutrient hotspots and impacts but does not limit nutrients. TMDL advocates a 'we'll evaluate later' approach to septics and other nutrient sources.</li> <li>(11) Better to wait until Budd Inlet and Capital Lake TMDL are complete. Maybe move forward with temperature segments only.</li> <li>(12) Lack of NCC is not an excuse to do nothing. Use the data we have and move forward. No good reason for putting things off. The TMDL should have addressed nutrients even if data</li> </ul>	<ul style="list-style-type: none"> <li>(1) An approved TMDL may help in retiring water rights and obtaining grant funds. An approved TMDL may help bring government partners to the table such as Thurston County and get conservation districts to work together.</li> <li>(2) Acknowledged the TMDL has some deficiencies and is working with EPA on some issues. Benefits of TMDL are relatively minor.</li> <li>(3) TMDL was split because of the contentious nature of Capital Lake and Budd Inlet. Data would become outdated if Ecology waited to do all waters at once. Evidence is pointing primarily to shade and buffers for the Deschutes.</li> <li>(4) Any buffers that Ecology pays for would have to meet NMFS buffer rule (100 ft rather than 75 ft.).</li> </ul>	<p>We primarily listened and took notes. Chris asked Nina to elaborate on Columbia dioxin TMDL and checkpoint approach.</p>

<p>were not perfect.</p> <p>(13) TMDL does not justify in-stream sediment fines target. How does in-stream fine targets align with WQS?</p> <p>(14) Ecology is hesitant to address Capitol Lake because of benefits as sediment trap, better than a muddy estuary, expensive infrastructure changes (Lake outlet works, MS4, LOTT facility).</p> <p>(15) Checkpoint approach used in Columbia dioxin TMDL is an appealing large watershed approach.</p> <p>(16) Ecology should not get credit for a TMDL when the allocations do not resolve the DO and nutrient issue.</p> <p>(17) Margin of safety and antidegradation section is confusing</p> <p>(18) Would be willing to consider temperature carve out of NCC remand. TMDLs for DO, pH should not move forward until Budd Inlet is completed. Opinion on sediment was limited.</p>		
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## REGION 10 OWW TOPIC BRIEFING

### TRIBAL CONSULTATION AND REVIEW UPDATE FOR DESCHUTES TOTAL MAXIMUM DAILY LOAD (TMDL), THURSTON & LEWIS COUNTIES, WASHINGTON

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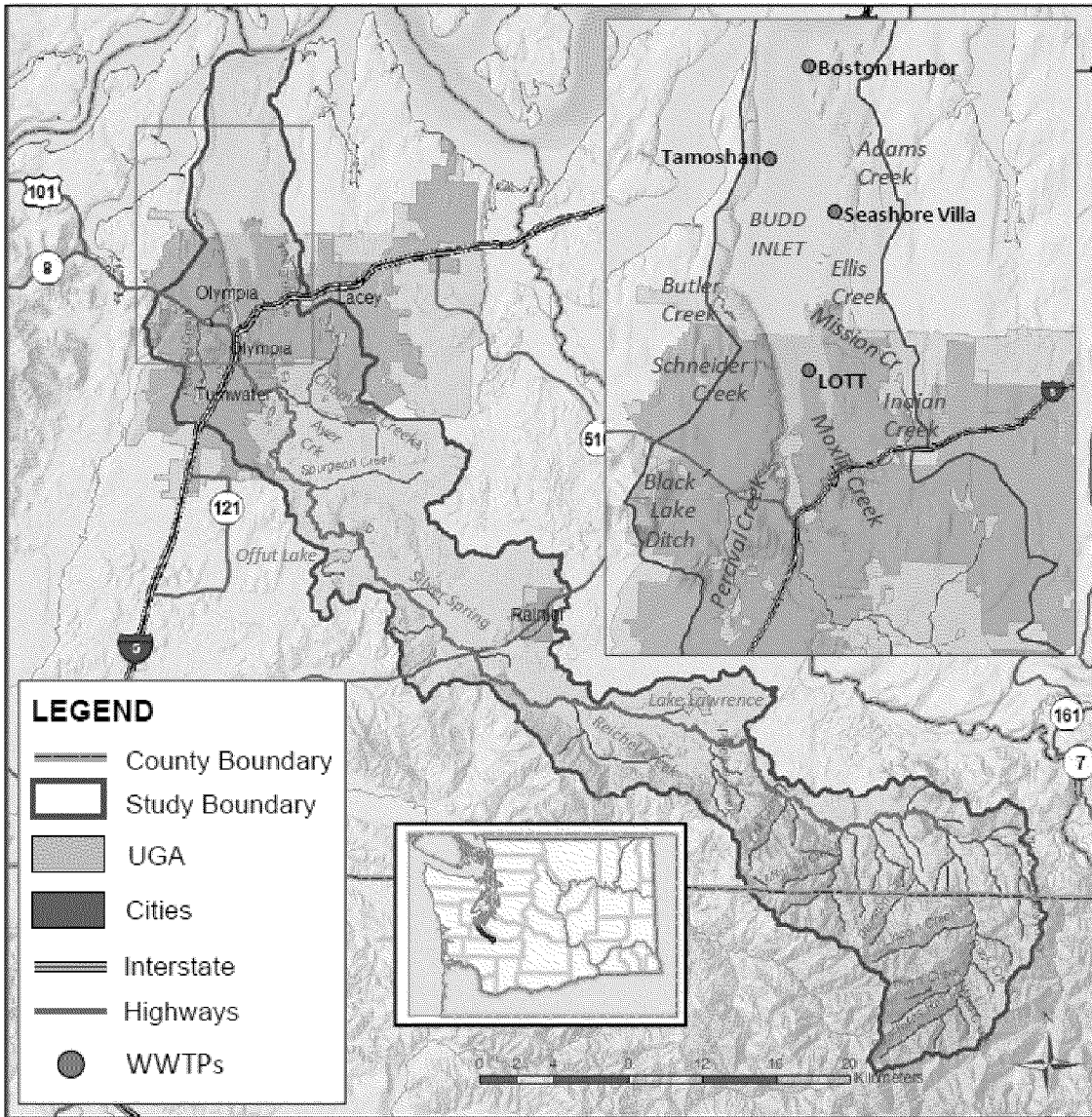
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- **Ex. 5 - Deliberative Process**
- Options for Moving Forward

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The Deschutes River, Percival Creek, and Budd Inlet Tributaries (Phase 1) TMDL study area (186 mi<sup>2</sup>) is located in south Puget Sound and is situated within the boundaries of Thurston and Lewis Counties, Washington (**Figure 1**). The study area includes the major cities or towns of Olympia, Lacey, Tumwater, and Rainier. Significant data collection to support the Phase 1 TMDL began in 2003. Data analysis and modeling concluded in 2012. On December 17, 2015, Ecology submitted the final Phase 1 TMDL to EPA for approval. The submitted TMDL package includes a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment). EPA understands that Ecology is developing a TMDL for Budd Inlet and Capitol Lake as Phase 2 of the Deschutes TMDL.

The Squaxin Island Tribe (SIT) has maintained throughout the TMDL development and public notice process that critical aquatic improvement measures are missing from the TMDL. EPA met with SIT in 2015 to discuss these concerns and again on 6/30/2016 as part of the formal coordination process. In

## Ex. 5 - Deliberative Process



**Figure 1.** Study Area for Deschutes TMDLs

### Quick Summary

- ✓ Ecology is seeking approval for TMDLs that span 71 segments
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## Ex. 5 - Deliberative Process

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### Tribal Consultation and Outcomes

## Ex. 5 - Deliberative Process

In addition, SIT included the following in their public notice comments:

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## REGION 10 OWW TOPIC BRIEFING

### TRIBAL CONSULTATION AND REVIEW UPDATE FOR DESCHUTES TOTAL MAXIMUM DAILY LOAD (TMDL), THURSTON & LEWIS COUNTIES, WASHINGTON

#### Meeting Purpose

Provide background information and update Dan on the following:

- Status of EPA TMDL Review;
- Squaxin Island Tribe TMDL Concerns; and
- Options for Moving Forward

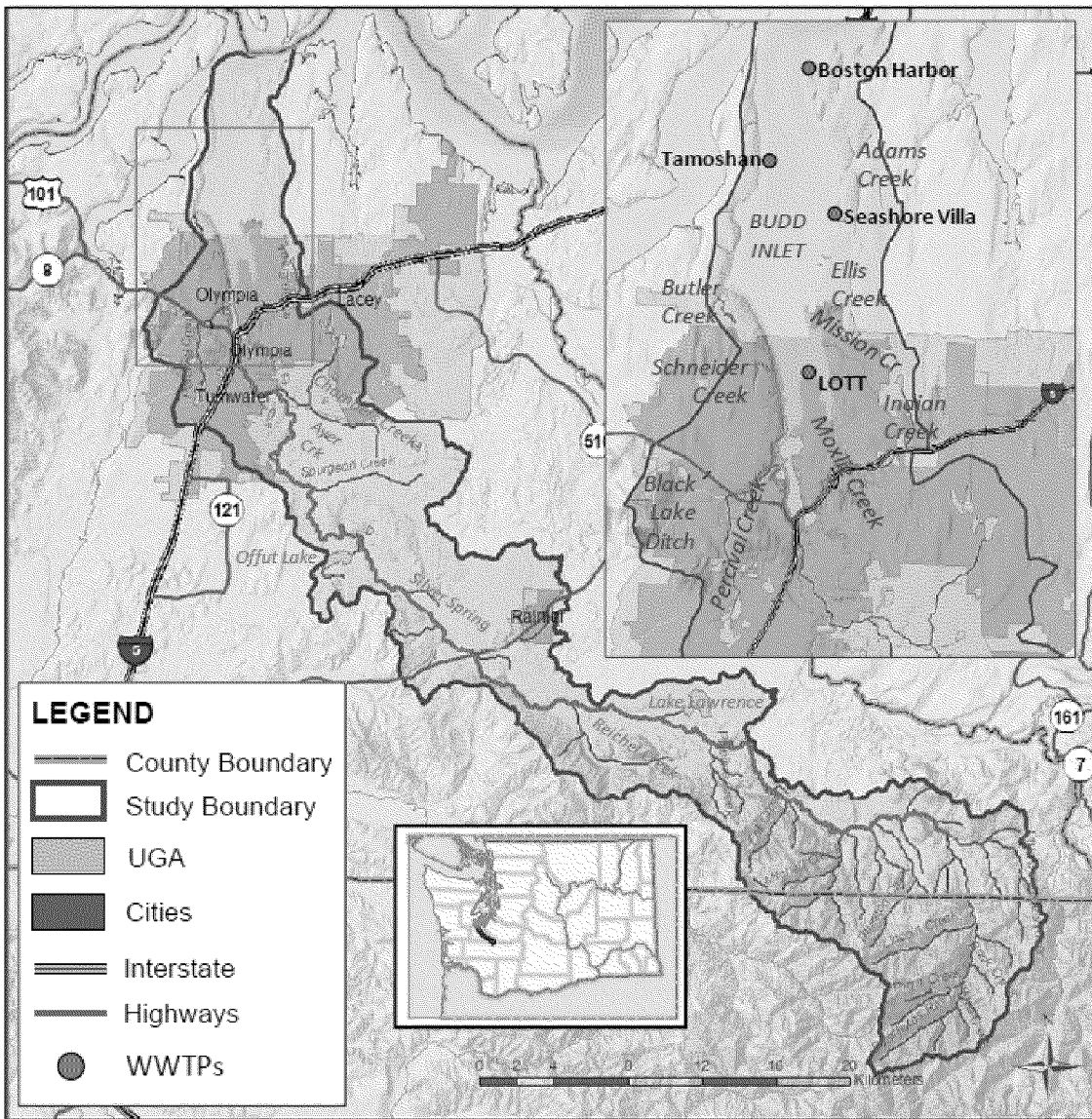
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The Squaxin Island Tribe (SIT) has maintained throughout the TMDL development and public notice process that critical aquatic improvement measures (see *Squaxin Island Tribe TMDL Concerns*) are missing from the TMDL. EPA met with SIT in 2015 to discuss these concerns. In addition to concerns

## Ex. 5 - Deliberative Process





**Figure 1.** Study Area for Deschutes TMDLs (from Roberts et al., 2012, page 6).

### Quick Summary

- ✓ Ecology is seeking approval for TMDLs that span 71 segments
- ✓ Category 5 impairments: water temperature, DO, pH, fecal coliform bacteria, and fine sediment
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- ✓ Surrogates are proposed for 4 of 5 pollutants
- ✓ The TMDL seeks to achieve temperature, DO, and pH water quality standards through increased stream shading (primarily)
- ✓ Ecology predicts that WQS for temperature, DO, and pH will be achieved by 2065.
- ✓ Permittees include: 5 municipal stormwater-MS4s, 7 sand & gravel, 9 industrial stormwater, and 25+ construction stormwater. The boundary of the Phase 1 TMDL does not include wastewater treatment point sources. Phase 2 of the TMDL will include the LOTT regional wastewater facility that serves south Puget Sound.

## Ex. 5 - Deliberative Process

### Status of Phase 1 TMDL Review

Given the complexity of the Phase 1 TMDL, 6 members of the watershed unit participated in the initial review of the TMDL in February 2016. Concerns identified from this group review were shared with Ecology during a meeting held in Lacey on 2/23/2016.

**Ex. 5 - Deliberative Process**

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In addition, SIT included the following in their public notice comments:

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To my knowledge, SIT has not explicitly requested that minimum in-stream flows be determined for the Deschutes River. However, such conversations are likely to arise or are already occurring.

### Options for Moving Forward

## Ex. 5 - Deliberative Process

**To:** Ragsdale, Dave (ECY)[RAGS461@ECY.WA.GOV]; Croxton, Dave[Croxton.David@epa.gov]; Mann, Laurie[mann.laurie@epa.gov]; Henszey, Jo[Henszey.Jo@epa.gov]  
**Cc:** Eaton, Thomas[Eaton.Thomas@epa.gov]; Wilcox, Michelle[wilcox.michelle@epa.gov]  
**From:** Cope, Ben  
**Sent:** Wed 6/5/2013 3:55:46 PM  
**Subject:** RE: Ecology meeting on Puget Sound DO studies June 20th 1-3 pm? - Response requested by Thursday

Dave, All –

I'm very pleased that Ecology is setting up this meeting, { **Ex. 6 - Personal Privacy** } Just a few big picture words on the science. While some may be frustrated with how long it's taken to get to this point, the modeling work done by Ecology and PNNL is extraordinary in my opinion. Puget Sound models are extremely difficult to build because of the variation in the system (shallows, deeps, mud flats, sharp corners, sills, islands, etc.). I'm amazed what they have accomplished on a relatively small budget in comparison to similar endeavors for other major waterbodies, e.g., Great Lakes, Chesapeake.

They've also done a outstanding work in building scenarios - estimating natural conditions, future population-related loadings, ocean trends, climate change...etc.

This doesn't mean there aren't uncertainties and limitations. There are, and I'd encourage you to grill the modelers these issues. This is not the end of the science effort...but getting to this point is a really important milestone.

-BC

**From:** Ragsdale, Dave (ECY) [mailto:RAGS461@ECY.WA.GOV]  
**Sent:** Tuesday, June 04, 2013 9:56 AM  
**To:** Croxton, Dave; Mann, Laurie; Henszey, Jo; Cope, Ben  
**Cc:** Eaton, Thomas; Wilcox, Michelle; akol461@ecy.wa.gov; hbre461@ECY.WA.GOV

**Subject:** Ecology meeting on Puget Sound DO studies June 20th 1-3 pm? - Response requested by Thursday

Dave, Laurie and all. I've just spoken with Andrew and strongly agree we should have an Ecology/EPA briefing on the status of some important Puget Sound modeling/TMDL work.

This meeting would include a technical presentation from Ecology-EAP modelers about their findings regarding the pollutant loading causing low dissolved oxygen in the Sound. Follow-up discussion should also be informative (if short, given a two hour meeting) and hopefully clarify EPA expectations for Ecology as they get closer to finishing up the Deschutes/Budd Inlet TMDL.

I hope this time works for you, we can set up conference call line and email the presentations in advance it helps your schedule by not having to drive to Olympia. The three required EPA staff for this meeting are Dave C, Laurie and myself... but I hope the rest of you can participate. Please respond by this Thursday whether this time/date works for you.

Thanks. Dave R.

**From:** Kolosseus, Andrew (ECY)  
**Sent:** Tuesday, June 04, 2013 9:44 AM  
**To:** Ragsdale, Dave (ECY)  
**Subject:** FW: EPA - Ecology meeting on Puget Sound DO studies

June 20<sup>th</sup> 1-3 pm. Will this work for a quorum of EPA folks?

Andrew Kolosseus  
Washington State Dept. of Ecology  
PO Box 47600  
Olympia, WA 98504-7600  
(360) 407-7543

**From:** Kolosseus, Andrew (ECY)  
**Sent:** Friday, May 31, 2013 1:33 PM  
**To:** 'Mann, Laurie'  
**Subject:** RE: EPA - Ecology meeting on Puget Sound DO studies

Laurie –

How about later on June 20? We could get a one-hour block for most Ecology people anytime between 12 and 3. Any other day in June and our available drops off dramatically. Ben is pretty up-to-speed on at least one the three projects, so perhaps we can meet with him separately.

--Andrew

Andrew Kolosseus  
Washington State Dept. of Ecology  
PO Box 47600  
Olympia, WA 98504-7600  
(360) 407-7543

**From:** Mann, Laurie [<mailto:mann.laurie@epa.gov>]  
**Sent:** Friday, May 31, 2013 9:27 AM  
**To:** Kolosseus, Andrew (ECY); Cope, Ben  
**Subject:** RE: EPA - Ecology meeting on Puget Sound DO studies

Hi Andrew,

Ragsdale's electronic calendar is completely empty (he doesn't use it, I suspect). When I find out when he is back in the office I'll let you know (I'm fairly sure he'll be back long before June 20<sup>th</sup>). Unfortunately, Ben is out of the office the week of your proposed meeting (and returns



June 30<sup>th</sup>). Croxton and I are currently booked for that morning, although it's possible one or both of us could reschedule our existing meetings.

I do think it's important that one EPA person besides Ragsdale be at the meeting, since Ragsdale may not be around to finish up these projects. I'll connect with my boss to try to figure out who might be the person working on these projects Ex. 6 - Personal Privacy ..I'll let you know!

Thanks,

Laurie

**Laurie Mann** | Environmental Engineer

**U.S. Environmental Protection Agency** | Region 10

P: (206) 553.1583 | [mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)

Follow @EPAnorthwest on Twitter! <https://twitter.com/EPAnorthwest>

**From:** Kolosseus, Andrew (ECY) [<mailto:AKOL461@ECY.WA.GOV>]

**Sent:** Thursday, May 30, 2013 4:27 PM

**To:** Mann, Laurie; Cope, Ben

**Subject:** FW: EPA - Ecology meeting on Puget Sound DO studies

Laurie and Ben –

I'm trying to schedule an EPA-Ecology meeting through Dave, but it looks like he is out of the office. See message below. Any chance June 20 at 11am would work for you? (And can you see Dave's calendar for his availability? I can't....)

Andrew Kolosseus  
Washington State Dept. of Ecology  
PO Box 47600  
Olympia, WA 98504-7600  
(360) 407-7543

**From:** Kolosseus, Andrew (ECY)  
**Sent:** Thursday, May 30, 2013 4:19 PM  
**To:** Ragsdale, Dave (ECY)  
**Cc:** [ragdale.dave@epa.gov](mailto:ragdale.dave@epa.gov); Wagner, Lydia (ECY); Roberts, Mindy (ECY)  
**Subject:** EPA - Ecology meeting on Puget Sound DO studies

Dave –

We'd like to schedule a meeting to talk with EPA about our three Puget Sound DO projects (Budd Inlet, South Puget Sound Dissolved Oxygen Study, and the Puget Sound Dissolved Oxygen Model). We'd talk about our model results to-date, schedules, and next steps.

Unfortunately, scheduling will be tough. Over the next month, the best time for us is Thursday, June 20<sup>th</sup> at 11:00. Any chance it would work for you and a minimum quorum of EPA folks (Ben, Laurie, Croxton – whoever you think should be there)? From our end we'll have Mindy and possibly more of the modeling team, Zentner, Kim, Melissa, Kelly, Lydia, and me.

Let me know if that time would work. Otherwise we'll find a plan B time.

--Andrew

Andrew Kolosseus  
Washington State Dept. of Ecology  
PO Box 47600  
Olympia, WA 98504-7600  
(360) 407-7543

**To:** Zell, Christopher[zell.christopher@epa.gov]  
**From:** Croxton, Dave  
**Sent:** Wed 9/7/2016 11:00:53 PM  
**Subject:** RE: INTERNAL and DELIBERATIVE - Deschutes Proposal(s)

Good summary Chris. I don't have any particular comments and agree with your conclusions.

**From:** Zell, Christopher  
**Sent:** Wednesday, September 07, 2016 1:46 PM  
**To:** Byrne, Jennifer <Byrne.Jennifer@epa.gov>; Mann, Laurie <mann.laurie@epa.gov>; Croxton, Dave <Croxton.David@epa.gov>  
**Subject:** INTERNAL and DELIBERATIVE - Deschutes Proposal(s)

Good Afternoon,

Thank you for a great conversation yesterday. As requested during our meeting, I further investigated the viability of approving a smaller subset of waters and pollutants described by Andrew in the preceding email. The summary of my evaluation is included below for your consideration.

**Ecology's Preferred Option** - EPA approves the entire TMDL as submitted in December 2015.

-

#### EPA Response

## Ex. 5 - Attorney Client

**Ecology's Secondary Option** - EPA partially approves the TMDL that Ecology submitted. EPA approves the TMDL for temperature on the Deschutes River below river km 45 (downstream of Offutt Lake where the criteria is 17.5 degrees and above the natural condition) {this tentatively includes listings 6576, 48711, and 48713}.

- Fine sediment

- pH
- Bacteria

#### EPA Evaluation

#### Temperature Segments below Offutt Lake

**Ex. 5 - Attorney Client**

#### Fine Sediment

**Ex. 5 - Attorney Client**

#### pH

**Ex. 5 - Attorney Client**

# **Ex. 5 - Attorney Client**

*Adams, Ayer, and Black Lake Ditch*

# **Ex. 5 - Attorney Client**

*Deschutes River segment 9438*

# **Ex. 5 - Attorney Client**

Bacteria

# **Ex. 5 - Attorney Client**

# Ex. 5 - Attorney Client

## Conclusions

# Ex. 5 - Attorney Client

I look forward to your thoughts and guidance!

Chris

**From:** Zell, Christopher

**Sent:** Thursday, September 01, 2016 5:05 PM

**To:** Croxton, Dave <[Croxton.David@epa.gov](mailto:Croxton.David@epa.gov)>  
**Cc:** Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** FW: Discuss Deschutes Proposal(s)

Hi Dave,

Please see below. Would you like to join our call tomorrow? It is scheduled from 10 am to noon.

Thanks!

Chris

**From:** Kolosseus, Andrew (ECY) [<mailto:AKOL461@ECY.WA.GOV>]  
**Sent:** Thursday, September 01, 2016 4:58 PM  
**To:** Zell, Christopher <[zell.christopher@epa.gov](mailto:zell.christopher@epa.gov)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** RE: Discuss Deschutes Proposal(s)

Chris and Laurie:

Here are my two options for our discussion tomorrow. I have shared the secondary option with Rich Doenges, my boss, but not anyone else within Ecology management. So that's an important caveat. I know that Rich had significant concerns with some of it (he's definitely pushing from the preferred option), so he might attend part of the meeting tomorrow. We are very interested in any ideas that you might have moving forward (sounded like you've had discussions but nothing written yet – any ideas you can share at the meeting?).

Andrew



### **Preferred Option:**

EPA approves the entire TMDL as submitted in December 2015. Ecology began work on this TMDL in 2003, and EPA was engaged in the process the entire time. Multiple EPA staff commented on draft versions of the TMDL and significant changes were made in good faith to address EPA's comments. Ecology engaged the tribe and stakeholders to finish this TMDL, and gained a remarkable amount of support given the complexity of the problem. The TMDL was a 12 year effort, and includes 75 foot buffers to increase shade, the most important factor related to temperature, dissolved oxygen, and pH. The TMDL also addresses bacteria and – at the request of Squaxin Island Tribe – fine sediment. The Deschutes TMDL is a priority in EPA's WQ measure 27. Approval of the TMDL will focus energy on implementation on the TMDL and the next phase of work in the watershed, Budd Inlet.

### **Secondary Option:**

EPA partially approves the TMDL that Ecology submitted. EPA approves the TMDL for:

- ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Temperature on the Deschutes River below river km 45 (downstream of Offutt Lake where the criteria is 17.5 degrees and above the natural condition) {this tentatively includes listings 6576, 48711, and 48713}
- ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Fine sediment
- ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ pH
- ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Bacteria

EPA takes no action on the dissolved oxygen and remaining temperature listings. This approach maintains the implementation plan that will be used by stakeholders and permittees to improve water quality in the basin, minimizes the amount of non-value-added work for all parties involved, and focuses approval on the least controversial listings.

Andrew Kolosseus  
Washington State Dept. of Ecology  
PO Box 47775  
Olympia, WA 98504-7775

(360) 407-7543

**From:** Zell, Christopher [<mailto:zell.christopher@epa.gov>]  
**Sent:** Thursday, September 01, 2016 9:07 AM  
**To:** Kolosseus, Andrew (ECY) <[AKOL461@ECY.WA.GOV](mailto:AKOL461@ECY.WA.GOV)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** RE: Discuss Deschutes Proposal(s)

Good Morning Andrew,

I was out all last week and am still catching up. We met a few weeks ago to discuss potential options for moving forward. It's not clear to me we have identified solid options for moving forward just yet that would not require some rework. Additional conversations are planned. Looking forward to our call tomorrow and hope you are well!

Chris

**From:** Kolosseus, Andrew (ECY) [<mailto:AKOL461@ECY.WA.GOV>]  
**Sent:** Thursday, September 01, 2016 8:54 AM  
**To:** Zell, Christopher <[zell.christopher@epa.gov](mailto:zell.christopher@epa.gov)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** RE: Discuss Deschutes Proposal(s)

Chris and Laurie:

Re-pinging on the e-mail below, and wanting to figure out details for tomorrow's meeting. I have a written proposal that I can share with you – either via e-mail if it's a phone meeting or you can look at my copy if we meet in person. What I am proposing is fairly straight-forward and could probably be adequately explained over the phone.

And Laurie, did you get a call from Nancy regarding Lower White River? It sounds like they are approved to discuss an option with us in mid-September and will begin writing something. While I don't know the details, I'm inferring from Nancy's non-answers to some of my questions that their option may not be something we would support. I am desperately hoping that I'm wrong.

Andrew

Andrew Kolosseus  
Washington State Dept. of Ecology  
PO Box 47775  
Olympia, WA 98504-7775  
(360) 407-7543

**From:** Kolosseus, Andrew (ECY)  
**Sent:** Tuesday, August 23, 2016 4:09 PM  
**To:** 'Zell, Christopher' <[zell.christopher@epa.gov](mailto:zell.christopher@epa.gov)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** RE: Discuss Deschutes Proposal(s)

Good afternoon:

Hope everyone is enjoying our nice summer weather – August here is better than the Midwest! To make sure we keep moving, here's the status as I see it.

- Any luck with the bacteria CFU translator proposal or a counter-proposal? Will you have something to discuss on this topic by Sept. 2?

- We'll meet on the 2<sup>nd</sup> – I'll share my multiple proposals for moving forward. EPA will share yours later in September as per Chris's e-mail below. Do you have a date for that?

• Kelly Susewind met with Jeff sometime recently. I've only heard the outcome second hand, but the short summary is there was nothing substantive. Was Dan O. going to check in with Kelly or Jeff?

Anything else?

Andrew Kolosseus  
Washington State Dept. of Ecology  
PO Box 47775  
Olympia, WA 98504-7775  
(360) 407-7543

**From:** Zell, Christopher [<mailto:zell.christopher@epa.gov>]  
**Sent:** Wednesday, August 10, 2016 8:36 AM  
**To:** Kolosseus, Andrew (ECY) <[AKOL461@ECY.WA.GOV](mailto:AKOL461@ECY.WA.GOV)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** RE: Discuss Deschutes Proposal(s)

Sounds great Andrew, looking forward to our chat on September 2<sup>nd</sup>! ☺

Best,

Chris

**From:** Kolosseus, Andrew (ECY) [<mailto:AKOL461@ECY.WA.GOV>]  
**Sent:** Tuesday, August 09, 2016 2:24 PM  
**To:** Zell, Christopher <[zell.christopher@epa.gov](mailto:zell.christopher@epa.gov)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>

**Subject:** RE: Discuss Deschutes Proposal(s)

Chris:

Thanks for the e-mail. Let's keep our September 2 meeting as a check-in phone call. Let's also set up another meeting in September by which time we all commit to resolving the bacteria issue and identifying proposals. I'll let you pick the date – I'm generally available any time after the 12<sup>th</sup>.

From a previous e-mail:

2. Develop potential solutions for all eight items (e.g. 5 buckets). Everything done except for bacteria CFU translator. EPA will either okay my proposal or counter-proposal. Andrew commits EPA to completing bacteria issues by the end of the month.
3. Laurie's idea of everyone coming up with multiple proposals (at least two) for an overall approach to moving forward on the TMDL. Proposals cover what we'll do for each parameter/listing. We set a meeting for Friday, Sept 2 from 10-12. We will strive to have sharable proposals by then, or share what we have, or postpone the meeting if necessary.

Andrew

Andrew Kolosseus  
Washington State Dept. of Ecology  
PO Box 47775  
Olympia, WA 98504-7775  
(360) 407-7543

**From:** Zell, Christopher [<mailto:zell.christopher@epa.gov>]  
**Sent:** Tuesday, August 09, 2016 12:50 PM

**To:** Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>; Kolosseus, Andrew (ECY) <[AKOL461@ECY.WA.GOV](mailto:AKOL461@ECY.WA.GOV)>  
**Subject:** Discuss Deschutes Proposal(s)

Hi Andrew,

Hope you had a great weekend!

Could we move our discussion into September? In reviewing schedules and review timelines, it occurred to me that identifying definitive proposal(s) by late August might be challenging. We can keep this date to update each other if that makes sense. What are your thoughts?

Best,

Chris

## Meeting Purpose

- Actions for moving forward with the Deschutes TMDL
- Summary of TMDL issues and Agency viewpoints
- Review Path Forward Discussed with Ecology during 1/10/2017 meeting in Lacey, WA

## Project Background

Ecology submitted the final Phase 1 Deschutes TMDL to EPA for approval on December 17, 2015. The submitted TMDL package included a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment).

Ex. 5 - Deliberative Process

# Ex. 5 - Deliberative Process

# Ex. 5 - Deliberative Process

## Actions for Moving Forward

40 CFR 130.7(d)(2): “The Regional Administrator shall either approve or disapprove such listing and loadings not later than 30 days after the date of submission....”

# Ex. 5 - Deliberative Process

**Ex. 5 - Deliberative Process**



**REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)**

**Summary of TMDL Issues and Viewpoints**

The WU has itemized TMDL issues and viewpoints in the table below to assist management conversations with Ecology.

# Ex. 5 - Deliberative Process

## A Path Forward

EPA (CZ, DC) and Ecology (SWRO) met on 1/10/2017 in Lacey, WA to discuss a path forward.

# Ex. 5 - Deliberative Process

Next Steps identified during the meeting include: (1) independent respective staff briefings of Heather and Dan regarding Options, and (2) follow-up meeting (planned for 2/17) with Dan, Heather, and respective staff to confirm path forward (if needed). (3) Could contact NWEA and SIT

**REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)**

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Ex. 5 - Deliberative Process

## Ex. 5 - Deliberative Process

# Ex. 5 - Deliberative Process

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# Ex. 5 - Deliberative Process

**Ex. 5 - Deliberative Process**

REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)

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**REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)**



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Ex. 5 - Deliberative Process

**Ex. 5 - Deliberative Process**

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40 CFR 130.7(d)(2): “The Regional Administrator shall either approve or disapprove such listing and loadings not later than 30 days after the date of submission...”

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

**REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)**

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**REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)**

## **DRAFT BRIEFING FOR DAN**

### **TRIBAL CONSULTATION AND REVIEW UPDATE FOR DESCHUTES TOTAL MAXIMUM DAILY LOAD (TMDL), THURSTON COUNTY, WASHINGTON**

#### **Meeting Purpose**

Provide background information and update Dan on the following:

- Status of EPA TMDL Review;
- Squaxin Island Tribe TMDL Concerns; and
- Options for Moving Forward

#### **Project Background**

The Deschutes River, Percival Creek, and Budd Inlet Tributaries (Phase 1) TMDL study area (186 mi<sup>2</sup>) is located in south Puget Sound and is situated within the boundaries of Thurston and Lewis Counties, Washington. The study area includes the major cities or towns of Olympia, Lacey, Tumwater, and Rainier. Significant data collection to support the Phase 1 TMDL began in 2003. Data analysis and modeling concluded in 2012. On December 17, 2015, Ecology submitted the final Phase 1 TMDL to EPA for approval. The submitted TMDL package includes a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment). EPA understands that Ecology is developing a TMDL for Budd Inlet and Capitol Lake as Phase 2 of the Deschutes TMDL. According to the timeline shared with EPA in March 2016, Ecology is tentatively planning to submit the Phase 2 TMDL for approval in June 2019.

## **Ex. 5 - Deliberative Process**

#### **Quick Facts**

- ✓ Ecology is seeking approval for TMDLs that span 71 segments
- ✓ Category 5 impairments: water temperature, DO, pH, fecal coliform bacteria, and fine sediment
- ✓ Category 4C pollution: in-stream flows and large woody debris
- ✓ TMDL split into two phases given technical complexity and political ramifications related to Capitol Lake and Budd Inlet impairments
- ✓ Surrogates are proposed for 4 of 5 pollutants
- ✓ The TMDL seeks to achieve temperature, DO, and pH water quality standards through increased stream shading
- ✓ Ecology predicts that WQS for temperature, DO, and pH will be achieved by 2065.

- ✓ Permittees include: 5 municipal stormwater-MS4s, 7 sand & gravel, 9 industrial stormwater, and 25+ construction stormwater. The boundary of the Phase 1 TMDL does not include wastewater treatment point sources. Phase 2 of the TMDL will include the LOTT regional wastewater facility that serves south Puget Sound.

## **Ex. 5 - Deliberative Process**

Status of Phase 1 TMDL Review

## **Ex. 5 - Deliberative Process**

# **Ex. 5 - Deliberative Process**

Squaxin Island Tribe Concerns

# **Ex. 5 - Deliberative Process**



requested the following agenda items be including during our consultation meeting scheduled for June 30<sup>th</sup>, 2016:

---

**“ River Flow**

- Decreasing flows of the Deschutes River
- River flow in the Ecology’s Deschutes River temperature modeling

**Ex. 5 - Deliberative Process**

- Actions to be taken.

**Riparian Shade**

- **Ex. 5 - Deliberative Process**
- Scale of the Deschutes River (flow, channel, and valley) relative to a 75 ft riparian buffer.
- Large woody debris as target allocations.
- Actions to be taken.

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

In addition, SIT included the following in their public notice comments:

“The Clean Water Act does not allow Ecology to draw a bright line between its water quality and quantity programs. Rather, the Act requires “comprehensive solutions” to prevent, reduce and eliminate pollution in concert with programs for managing water; and (2) establishes the supreme goal of restoring and maintaining the chemical, physical, and biological integrity of the Nation’s waters. Drawing a bright line is a prohibited “artificial distinction.” PUD No. 1 v. Ecology, 511 U.S. 700, 719 (1994).”

**Ex. 5 - Deliberative Process**

# **Ex. 5 - Attorney Client**

**To:** Mann, Laurie[mann.laurie@epa.gov]  
**From:** Henszey, Jo  
**Sent:** Fri 11/21/2014 4:27:36 PM  
**Subject:** FW: Tomorrow's Deschutes Meeting  
SIT-FW-RevCommentsNov14.xlsx

FYI, Our call's from 10am to 11:30 am this morning.

I really enjoyed spending time with you yesterday, both personally and professionally.

Thanks,

Jo

**From:** Wagner, Lydia (ECY) [mailto:LBLA461@ECY.WA.GOV]  
**Sent:** Friday, November 21, 2014 7:53 AM  
**To:** Henszey, Jo  
**Cc:** akol461@ecy.wa.gov; Bilhimer, Dustin (ECY)  
**Subject:** RE: Tomorrow's Deschutes Meeting

Hi Jo,

Here's the number:

Ex. 6 - Personal Privacy

Also, attached are the comments received by the SIT.

Lydia

**From:** Henszey, Jo [mailto:Henszey.Jo@epa.gov]  
**Sent:** Thursday, November 20, 2014 5:23 PM  
**To:** Wagner, Lydia (ECY)

**Cc:** Kolosseus, Andrew (ECY)

**Subject:** Tomorrow's Deschutes Meeting

Hi Lydia,

Do you have a call in number for tomorrow's meeting? Laurie and I will both be calling in.

Thanks,

Jo

Jo Henszey

Governmental Liaison

Washington Operations Office

USEPA, Region 10

360-753-9469

**To:** Croxton, Dave[Croxton.David@epa.gov]; Zell, Christopher[zell.christopher@epa.gov]  
**Cc:** Mann, Laurie[mann.laurie@epa.gov]; Edmondson, Lucy[Edmondson.Lucy@epa.gov]  
**From:** Henszey, Jo  
**Sent:** Fri 1/15/2016 7:25:52 PM  
**Subject:** Deschutes TMDL  
SquaxinComents\_DeschutesTMDL\_052715.xlsx

Hi Dave & Chris,

Very sorry I did not get back to you sooner. I am in the process of organizing files, etc. and will try to get the Deschutes files to Chris ASAP. We did not send an “official” tribal consultation letter to the Squaxin Island Tribe (SIT). We did however discuss this TMDL with Jeff Dickenson and Erika Marbet when we met with them regarding WA’s Draft Nonpoint Plan. As you may recall, Jeff indicated the tribe was prepared to file legal action against EPA on this TMDL. In advance of the complete set of files, I am attaching the official SIT comments submitted to Ecology on this plan.

Chris, et al. please do not hesitate to contact me if you have any questions or if I can help in any way. My cell phone number is (

Ex. 6 - Personal Privacy

Best,

Jo

Jo Henszey

Governmental Liaison

Washington Operations Office

USEPA, Region 10

360-753-9469

### Meeting Purpose

- Update Christine regarding EPA Assistance and TMDL Resubmit Progress
- Discuss options for moving forward in light of Puget Sound FOIA and HQ review

### Project Background

Ecology submitted the final Phase 1 Deschutes TMDL to EPA for approval on December 17, 2015. The submitted TMDL package included a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment).

Ex. 5 - Deliberative Process

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

## Ex. 5 - Deliberative Process

### Recommendation

## Ex. 5 - Deliberative Process

### Options for Moving Forward

40 CFR 130.7(d)(2): *“The Regional Administrator shall either approve or disapprove such listing and loadings not later than 30 days after the date of submission....”*

## Ex. 5 - Deliberative Process

## Ex. 5 - Deliberative Process



REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)

Summary of TMDL Issues and Viewpoints

# Ex. 5 - Deliberative Process

Deschutes TMDL (WA) Resubmit Letter

Correspondence Objectives

1. **Ex. 5 - Deliberative Process**
- 2.

**Ex. 5 - Deliberative Process**

Correspondence Considerations and Components

**Ex. 5 - Deliberative Process**

Questions

**Ex. 5 - Deliberative Process**

Deschutes WQLS Groups by Resolution Pathway and Mechanisms

**Ex. 5 - Deliberative Process**

# **Ex. 5 - Deliberative Process**

**Table 1. Water Quality Limited Segments Submitted for Approval in Deschutes TMDL**

Waterbody	2012 (2014) Listing ID	Pollutant	Resolution Group	Comments
Adams Creek	45462	Bacteria	B	-----
	45695	Bacteria	B	-----
	50965	pH	D	-----
Butler Creek	45471	Bacteria	B	-----
Butler Creek, SW F	45342	Bacteria	B	-----
Ellis Creek	45480	Bacteria	B	-----
Indian Creek	3758	Bacteria	B	-----
	45213	Bacteria	B	-----
	46410	Bacteria	B	-----
	74218	Bacteria	B	-----
Mission Creek	45212	Bacteria	B	-----
	46102	Bacteria	B	-----
Moxie Creek	3759	Bacteria	B	-----
	3761	Bacteria	B	-----
	45252	Bacteria	B	-----
	46432	Bacteria	B	-----
Schneider Creek	45559	Bacteria	B	-----
Ayer (Elwanger) Creek	5849	Bacteria	B	-----
	5850	pH	D	-----
	5851	Dissolved Oxygen	D	-----
	73229	Temperature	D	-----
Chambers Creek	45560	Bacteria	B	-----
Deschutes River	46499	Bacteria	B	-----
	46500	Bacteria	B	-----
	9881	Bacteria	B	-----
	46210	Bacteria	B	-----
	10894	Dissolved Oxygen	C	-----
	47753	Dissolved Oxygen	C	-----
	47754	Dissolved Oxygen	C	-----
	47756	Dissolved Oxygen	C	-----
	6576	Temperature	B	Confirm Below Offutt Lake with Ecology
	7590	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	48710	Temperature	B	Confirm Below Offutt Lake with Ecology
	48711	Temperature	B	Confirm Below Offutt Lake with Ecology
	48712	Temperature	B	Confirm Below Offutt Lake with Ecology
	48713	Temperature	B	Confirm Below Offutt Lake with Ecology
	48714	Temperature	B	Confirm Below Offutt Lake with Ecology
	48715	Temperature	B	Confirm Below Offutt Lake with Ecology
	48717	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	48718	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	9439	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	7588	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	7592	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	7593	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	7595	Temperature	B	Confirm Below Offutt Lake with Ecology
	48720	Temperature	B	Confirm Below Offutt Lake with Ecology
	48721	Temperature	B	Confirm Below Offutt Lake with Ecology
	48724	Temperature	C	Above Offutt Lake per WQ Atlas (2/13/2017)
	48726	Temperature	B	Confirm Below Offutt Lake with Ecology
	6232	Fine Sediment	A	-----
Huckleberry Creek	3757	Temperature	D	-----
Lake Lawrence Creek	47696	Dissolved Oxygen	D	-----
Reichel Creek	3763	Bacteria	B	-----
	45566	Bacteria	B	-----
	47714	Dissolved Oxygen	D	-----
	48666	Temperature	D	-----
Spurgeon Creek	46061	Bacteria	B	-----
Tempo Lake Outlet	48696	Temperature	D	-----
Unnamed Spring to Deschutes River	48923	Temperature	D	-----
Black Lake Ditch	47761	Dissolved Oxygen	D	-----
	47762	Dissolved Oxygen	D	-----
	50990	pH	D	-----
	48733	Temperature	B	Maybe A? Applies NCC
	48734	Temperature	B	Maybe A? Applies NCC
	48735	Temperature	B	Maybe A? Applies NCC
Percival Creek	46103	Bacteria	B	-----
	46108	Bacteria	B	-----
	48085	Dissolved Oxygen	C	Applies NCC*
	48086	Dissolved Oxygen	C	Applies NCC*
	42321	Temperature	B	Maybe A? Applies NCC
	48249	Temperature	B	Maybe A? Applies NCC
	48727	Temperature	B	Maybe A? Applies NCC
	48729	Temperature	B	Maybe A? Applies NCC

\*In addition to applying the NCC, this TMDL does not include a linkage analysis and uses shade as a DO surrogate

## Meeting Purpose

- Actions for moving forward with the Deschutes TMDL
- Summary of TMDL issues and Agency viewpoints
- Review Path Forward Discussed with Ecology during 1/10/2017 meeting in Lacey, WA

## Project Background

Ecology submitted the final Phase 1 Deschutes TMDL to EPA for approval on December 17, 2015. The submitted TMDL package included a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment).

Ex. 5 - Deliberative Process

# Ex. 5 - Deliberative Process

# Ex. 5 - Deliberative Process

## Actions for Moving Forward

40 CFR 130.7(d)(2): “The Regional Administrator shall either approve or disapprove such listing and loadings not later than 30 days after the date of submission...”

# Ex. 5 - Deliberative Process

**Ex. 5 - Deliberative Process**

REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)

Summary of TMDL Issues and Viewpoints

# Ex. 5 - Deliberative Process

## A Path Forward

EPA (CZ, DC) and Ecology (SWRO) met on 1/10/2017 in Lacey, WA to discuss a path forward.

Ex. 5 - Deliberative Process

### **Ex. 5 - Deliberative Process**

# **Ex. 5 - Deliberative Process**



## REGION 10 OWW TOPIC BRIEFING

### TRIBAL CONSULTATION AND REVIEW UPDATE FOR DESCHUTES TOTAL MAXIMUM DAILY LOAD (TMDL), THURSTON & LEWIS COUNTIES, WASHINGTON

#### Meeting Purpose

Provide background information and discuss with Dan the following:

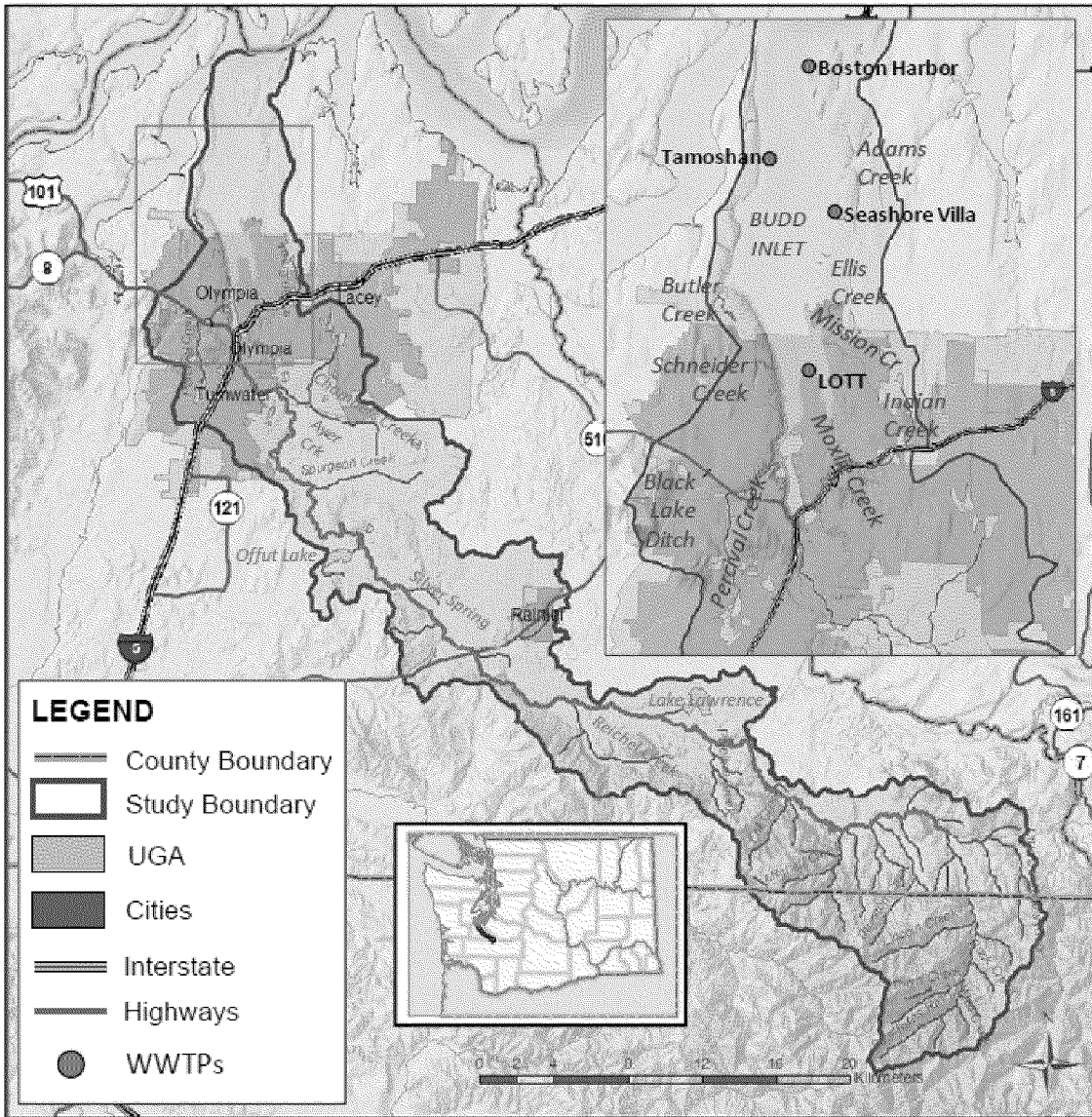
- Overall Status of EPA Watershed Unit Review;
- Discussions with NWEA;
- Tribal Consultation Outcomes;
- Ecology Regional Office Position and EPA Evaluation;

- **Ex. 5 - Deliberative Process**
- Options for Moving Forward

#### Project Background

The Deschutes River, Percival Creek, and Budd Inlet Tributaries (Phase 1) TMDL study area (186 mi<sup>2</sup>) is located in south Puget Sound and is situated within the boundaries of Thurston and Lewis Counties, Washington (**Figure 1**). The study area includes the major cities or towns of Olympia, Lacey, Tumwater, and Rainier. Significant data collection to support the Phase 1 TMDL began in 2003. Data analysis and modeling concluded in 2012. On December 17, 2015, Ecology submitted the final Phase 1 TMDL to EPA for approval. The submitted TMDL package includes a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment). EPA understands that Ecology is developing a TMDL for Budd Inlet and Capitol Lake as Phase 2 of the Deschutes TMDL.

## Ex. 5 - Deliberative Process



**Figure 1.** Study Area for Deschutes TMDLs

### Quick Summary

- ✓ Ecology is seeking approval for TMDLs that span 71 segments
- ✓ Category 5 impairments: water temperature, DO, pH, fecal coliform bacteria, and fine sediment
- ✓ Category 4C pollution: in-stream flows and large woody debris
- ✓ TMDL split into two phases given technical complexity and political ramifications related to Capitol Lake and Budd Inlet impairments. Complexities include Capitol Lake as a source of low DO to South Sound and nutrient reductions from stormwater sources to address Capitol Lake phosphorus impairment

- ✓ Surrogates are proposed for 4 of 5 pollutants
- ✓ The TMDL seeks to achieve temperature, DO, and pH water quality standards through increased stream shading
- ✓ Ecology predicts that WQS for temperature, DO, and pH will be achieved by 2065.
- ✓ Permittees include: 5 municipal stormwater-MS4s, 7 sand & gravel, 9 industrial stormwater, and 25+ construction stormwater. The boundary of the Phase 1 TMDL does not include wastewater treatment point sources. Phase 2 of the TMDL will include the LOTT regional wastewater facility that serves south Puget Sound.

## Ex. 5 - Deliberative Process

### Status of Watershed Unit Review

Given the complexity of the Phase 1 TMDL, 6 members of the watershed unit participated in the initial review of the TMDL in February 2016.

### Ex. 5 - Deliberative Process

## Ex. 5 - Deliberative Process

## Ex. 5 - Deliberative Process

## **Ex. 5 - Deliberative Process**

## **Ex. 5 - Deliberative Process**

### **NWEA Concerns**

SWRO (Andrew) scheduled a meeting with Nina Bell on August 2, 2016 in Portland, OR (at OR Ops office) to obtain NWEA feedback on the Deschutes TMDL as she had indicated unspecified concerns with the TMDL in previous discussions. Laurie and Chris participated in the meeting at the request of Ecology. Overall, Nina expressed an unfavorable opinion of the TMDL and summarized that the TMDL will not change or improve existing conditions. Nina did offer a potential ‘carve-out’ from the NCC remand for temperature segments of the Deschutes if buffer requirements were more detailed and were placed into the load capacity/allocation section of the TMDL. Nina explained the DO segments (and maybe pH by reference) of the TMDL were too problematic/flawed and should not move forward (no ‘carve-out’). Appendix A summarizes TMDL related concerns expressed by NWEA.

## Ex. 5 - Deliberative Process

In addition, SIT included the following in their public notice comments:

“The Clean Water Act does not allow Ecology to draw a bright line between its water quality and quantity programs. Rather, the Act requires “comprehensive solutions” to prevent, reduce and eliminate pollution in concert with programs for managing water; and (2) establishes the supreme goal of restoring and maintaining the chemical, physical, and biological integrity of the Nation’s waters. Drawing a bright line is a prohibited “artificial distinction.” PUD No. 1 v. Ecology, 511 U.S. 700, 719 (1994).”

EPA and Ecology met with SIT during a tribal coordination meeting on 6/30/2016 in Lacey, WA. Issues described above were discussed. An outcome of the meeting was a promised response to SIT from Ecology regarding minimum stream flows by the end of July 2016. The WU was not copied in any response by Ecology to SIT regarding this TMDL.

## Ex. 5 - Deliberative Process

Ecology Regional Office Position and EPA Evaluation

## Ex. 5 - Deliberative Process

# **Ex. 5 - Deliberative Process**

# **Ex. 5 - Deliberative Process**

# **Ex. 5 - Deliberative Process**



# **Ex. 5 - Deliberative Process**

## TMDL held in Portland, OR on 8/2/2016.

What follows is an itemized list of key statements expressed by Ecology, NWEA, and EPA. Notes in native, uncondensed form are available. It should be mentioned that NWEA appears to have constructed a bulleted list of TMDL issues that consists of about 30-50 comments on it. Maybe one-third of those comments were shared during the meeting on 8/2/2016.

NWEA	Ecology	EPA
<ul style="list-style-type: none"> <li>(1) Unconvinced that TMDL will change existing water quality conditions.</li> <li>(2) Downstream waters not protected (self-stated). Failing to protect DS waters is a big deal. TMDL is kind of a shell because it does not deal with DS waters or tributaries.</li> <li>(3) Buffers show up in implementation rather than allocation section.</li> <li>(4) Need to convert shade values into real, implementable surrogates. How was 75 ft. buffer determined? Vertical and areal density is important. What is mature vegetation?</li> <li>(5) The entire TMDL seems to be a surrogate. Suite of shade surrogates may be needed. Why was channel width not allocated as it was part of NCC demonstration.</li> <li>(6) Compliance with permit seems to be compliance with TMDL as WLAs are mostly existing permit conditions or restated WQS. WLAs do not seem to add value.</li> <li>(7) Using shade as surrogate for parameters other than temperature creates holes.</li> <li>(8) TMDL does not assess if current landuse practices, such as forestry, contribute to sediment impairments.</li> <li>(9) Reasonable Assurance section is inconsistent. Should consider actions that are not already occurring. Deferring to Fish and Forest assurances is a problem.</li> <li>(10) TMDL cites nutrient hotspots and impacts but does not limit nutrients. TMDL advocates a 'we'll evaluate later' approach to septics and other nutrient sources.</li> <li>(11) Better to wait until Budd Inlet and Capital Lake TMDL are complete. Maybe move forward with temperature segments only.</li> <li>(12) Lack of NCC is not an excuse to do nothing. Use the data we have and move forward. No good reason for putting things off. The TMDL should have addressed nutrients even if data</li> </ul>	<ul style="list-style-type: none"> <li>(1) An approved TMDL may help in retiring water rights and obtaining grant funds. An approved TMDL may help bring government partners to the table such as Thurston County and get conservation districts to work together.</li> <li>(2) Acknowledged the TMDL has some deficiencies and is working with EPA on some issues. Benefits of TMDL are relatively minor.</li> <li>(3) TMDL was split because of the contentious nature of Capital Lake and Budd Inlet. Data would become outdated if Ecology waited to do all waters at once. Evidence is pointing primarily to shade and buffers for the Deschutes.</li> <li>(4) Any buffers that Ecology pays for would have to meet NMFS buffer rule (100 ft rather than 75 ft.).</li> </ul>	<p>We primarily listened and took notes. Chris asked Nina to elaborate on Columbia dioxin TMDL and checkpoint approach.</p>

<p>were not perfect.</p> <p>(13) TMDL does not justify in-stream sediment fines target. How does in-stream fine targets align with WQS?</p> <p>(14) Ecology is hesitant to address Capitol Lake because of benefits as sediment trap, better than a muddy estuary, expensive infrastructure changes (Lake outlet works, MS4, LOTT facility).</p> <p>(15) Checkpoint approach used in Columbia dioxin TMDL is an appealing large watershed approach.</p> <p>(16) Ecology should not get credit for a TMDL when the allocations do not resolve the DO and nutrient issue.</p> <p>(17) Margin of safety and antidegradation section is confusing</p> <p>(18) Would be willing to consider temperature carve out of NCC remand. TMDLs for DO, pH should not move forward until Budd Inlet is completed. Opinion on sediment was limited.</p>		
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## REGION 10 OWW TOPIC BRIEFING

### TRIBAL CONSULTATION AND REVIEW UPDATE FOR DESCHUTES TOTAL MAXIMUM DAILY LOAD (TMDL), THURSTON & LEWIS COUNTIES, WASHINGTON

#### Meeting Purpose

Provide background information and discuss with Dan the following:

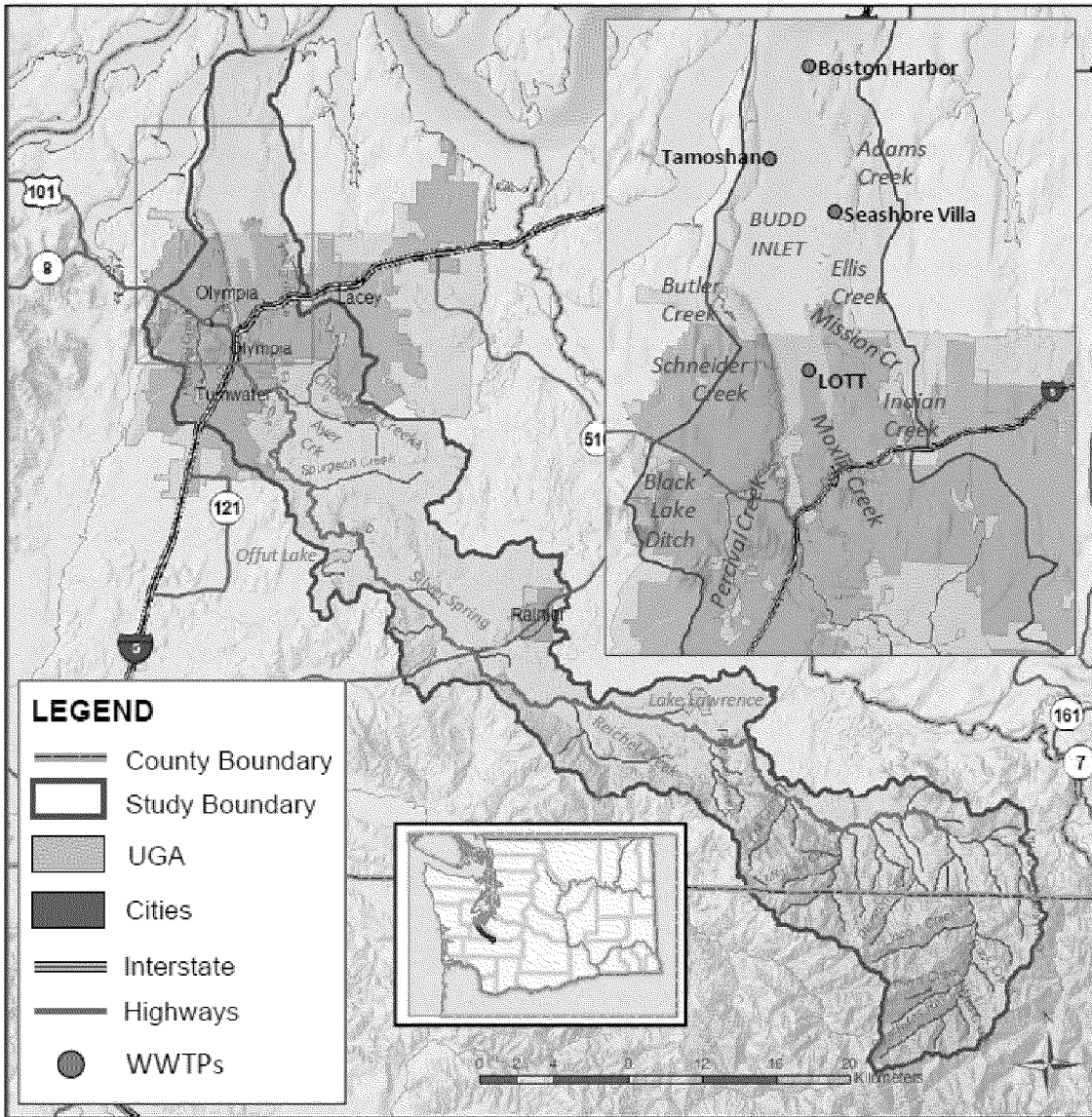
- Overall Status of EPA Watershed Unit Review;
- Discussions with NWEA;
- Tribal Consultation Outcomes;
- Ecology Regional Office Position and EPA Evaluation;
- **Ex. 5 - Deliberative Process**
- Options for Moving Forward

#### Project Background

The Deschutes River, Percival Creek, and Budd Inlet Tributaries (Phase 1) TMDL study area (186 mi<sup>2</sup>) is located in south Puget Sound and is situated within the boundaries of Thurston and Lewis Counties, Washington (**Figure 1**). The study area includes the major cities or towns of Olympia, Lacey, Tumwater, and Rainier. Significant data collection to support the Phase 1 TMDL began in 2003. Data analysis and modeling concluded in 2012. On December 17, 2015, Ecology submitted the final Phase 1 TMDL to EPA for approval. The submitted TMDL package includes a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment). EPA understands that Ecology is developing a TMDL for Budd Inlet and Capitol Lake as Phase 2 of the Deschutes TMDL.

The Squaxin Island Tribe (SIT) has maintained throughout the TMDL development and public notice process that critical aquatic improvement measures are missing from the TMDL. EPA met with SIT in 2015 to discuss these concerns and again on 6/30/2016 as part of the formal coordination process. In

## Ex. 5 - Deliberative Process



**Figure 1.** Study Area for Deschutes TMDLs

### Quick Summary

- ✓ Ecology is seeking approval for TMDLs that span 71 segments
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## Ex. 5 - Deliberative Process

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### Ex. 5 - Deliberative Process

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<p>Ecology is hesitant to address Capitol Lake because of benefits as sediment trap, better than a muddy estuary, expensive infrastructure changes (Lake outlet works, MS4, LOTT facility).</p> <p>(15) Checkpoint approach used in Columbia dioxin TMDL is an appealing large watershed approach.</p> <p>(16) Ecology should not get credit for a TMDL when the allocations do not resolve the DO and nutrient issue.</p> <p>(17) Margin of safety and antidegradation section is confusing</p> <p>(18) Would be willing to consider temperature carve out of NCC remand. TMDLs for DO, pH should not move forward until Budd Inlet is completed. Opinion on sediment was limited.</p>		
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### Tribal Consultation and Outcomes

## Ex. 5 - Deliberative Process

In addition, SIT included the following in their public notice comments:

“The Clean Water Act does not allow Ecology to draw a bright line between its water quality and quantity programs. Rather, the Act requires “comprehensive solutions” to prevent, reduce and eliminate pollution in concert with programs for managing water; and (2) establishes the supreme goal of restoring and maintaining the chemical, physical, and biological integrity of the Nation’s waters. Drawing a bright line is a prohibited “artificial distinction.” PUD No. 1 v. Ecology, 511 U.S. 700, 719 (1994).”

EPA and Ecology met with SIT during a tribal coordination meeting on 6/30/2016 in Lacey, WA. Issues described above were discussed. An outcome of the meeting was a promised response to SIT from Ecology regarding minimum stream flows by the end of July 2016. The WU was not copied in any response by Ecology to SIT regarding this TMDL.

# **Ex. 5 - Deliberative Process**

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# **Ex. 5 - Deliberative Process**

## REGION 10 OWW TOPIC BRIEFING

### TRIBAL CONSULTATION AND REVIEW UPDATE FOR DESCHUTES TOTAL MAXIMUM DAILY LOAD (TMDL), THURSTON & LEWIS COUNTIES, WASHINGTON

#### Meeting Purpose

Provide background information and update Dan on the following:

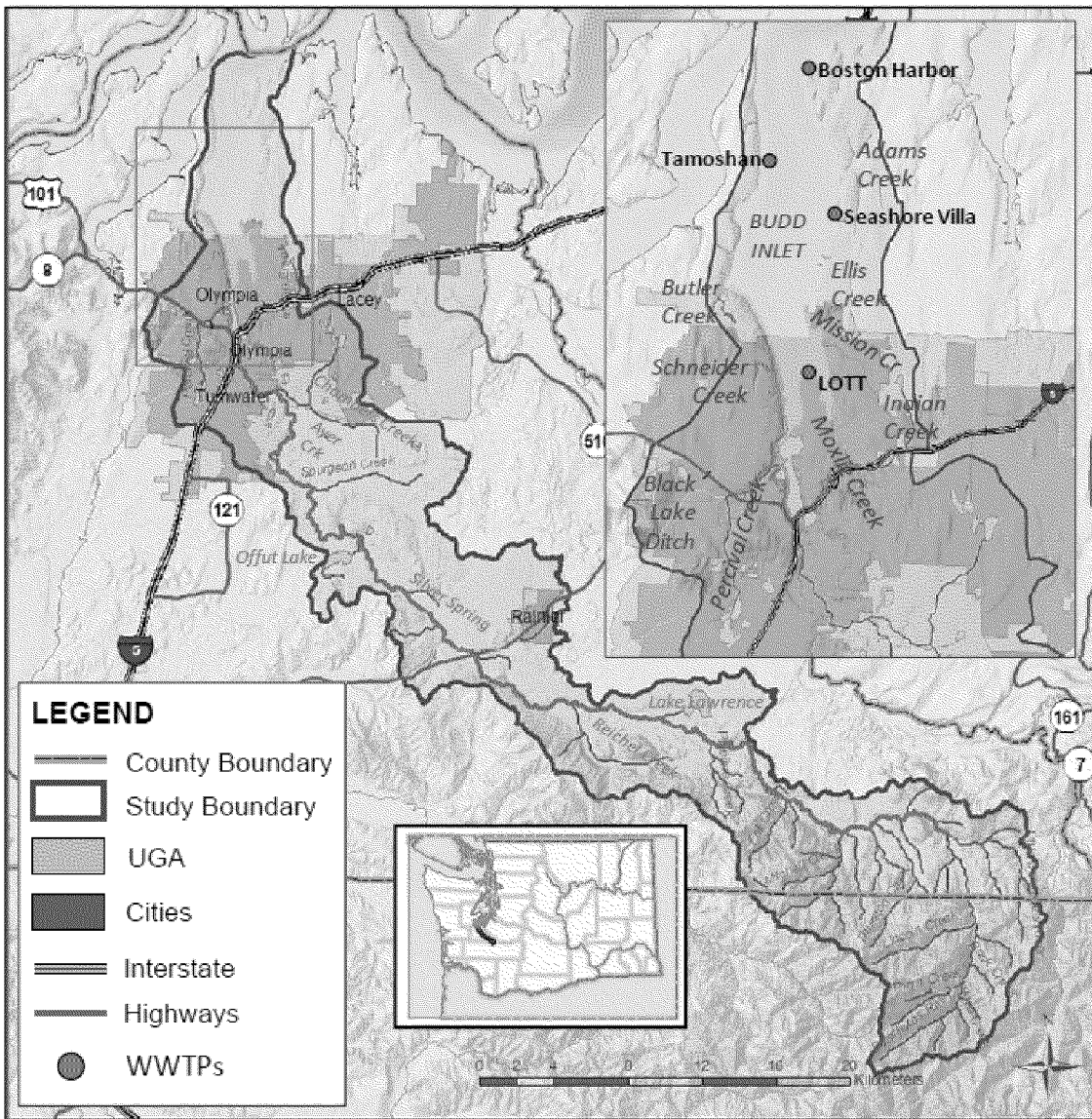
- Status of EPA TMDL Review;
- Squaxin Island Tribe TMDL Concerns; and
- Options for Moving Forward

#### Project Background

The Deschutes River, Percival Creek, and Budd Inlet Tributaries (Phase 1) TMDL study area (186 mi<sup>2</sup>) is located in south Puget Sound and is situated within the boundaries of Thurston and Lewis Counties, Washington (**Figure 1**). The study area includes the major cities or towns of Olympia, Lacey, Tumwater, and Rainier. Significant data collection to support the Phase 1 TMDL began in 2003. Data analysis and modeling concluded in 2012. On December 17, 2015, Ecology submitted the final Phase 1 TMDL to EPA for approval. The submitted TMDL package includes a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment). EPA understands that Ecology is developing a TMDL for Budd Inlet and Capitol Lake as Phase 2 of the Deschutes TMDL. According to the timeline shared with EPA in March 2016, Ecology is tentatively planning to submit the Phase 2 TMDL for approval in June 2019.

The Squaxin Island Tribe (SIT) has maintained throughout the TMDL development and public notice process that critical aquatic improvement measures (see *Squaxin Island Tribe TMDL Concerns*) are missing from the TMDL. EPA met with SIT in 2015 to discuss these concerns. In addition to concerns

## Ex. 5 - Deliberative Process



**Figure 1.** Study Area for Deschutes TMDLs (from Roberts et al., 2012, page 6).

### Quick Summary

- ✓ Ecology is seeking approval for TMDLs that span 71 segments
- ✓ Category 5 impairments: water temperature, DO, pH, fecal coliform bacteria, and fine sediment
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- ✓ TMDL split into two phases given technical complexity and political ramifications related to Capitol Lake and Budd Inlet impairments. Complexities include Capitol Lake as a source of low DO to South Sound and nutrient reductions from stormwater sources to address Capitol Lake phosphorus impairment

- ✓ Surrogates are proposed for 4 of 5 pollutants
- ✓ The TMDL seeks to achieve temperature, DO, and pH water quality standards through increased stream shading (primarily)
- ✓ Ecology predicts that WQS for temperature, DO, and pH will be achieved by 2065.
- ✓ Permittees include: 5 municipal stormwater-MS4s, 7 sand & gravel, 9 industrial stormwater, and 25+ construction stormwater. The boundary of the Phase 1 TMDL does not include wastewater treatment point sources. Phase 2 of the TMDL will include the LOTT regional wastewater facility that serves south Puget Sound.

## Ex. 5 - Deliberative Process

### Status of Phase 1 TMDL Review

Given the complexity of the Phase 1 TMDL, 6 members of the watershed unit participated in the initial review of the TMDL in February 2016. Concerns identified from this group review were shared with Ecology during a meeting held in Lacey on 2/23/2016.

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**



# **Ex. 5 - Deliberative Process**

## **Ex. 5 - Deliberative Process**

In addition, SIT included the following in their public notice comments:

“The Clean Water Act does not allow Ecology to draw a bright line between its water quality and quantity programs. Rather, the Act requires “comprehensive solutions” to prevent, reduce and eliminate pollution in concert with programs for managing water; and (2) establishes the supreme goal of restoring and maintaining the chemical, physical, and biological integrity of the Nation’s waters. Drawing a bright line is a prohibited “artificial distinction.” PUD No. 1 v. Ecology, 511 U.S. 700, 719 (1994).”

To my knowledge, SIT has not explicitly requested that minimum in-stream flows be determined for the Deschutes River. However, such conversations are likely to arise or are already occurring.

### Options for Moving Forward

## Ex. 5 - Deliberative Process

**To:** Ragsdale, Dave (ECY)[RAGS461@ECY.WA.GOV]; Croxton, Dave[Croxton.David@epa.gov]; Mann, Laurie[mann.laurie@epa.gov]; Henszey, Jo[Henszey.Jo@epa.gov]  
**Cc:** Eaton, Thomas[Eaton.Thomas@epa.gov]; Wilcox, Michelle[wilcox.michelle@epa.gov]  
**From:** Cope, Ben  
**Sent:** Wed 6/5/2013 3:55:46 PM  
**Subject:** RE: Ecology meeting on Puget Sound DO studies June 20th 1-3 pm? - Response requested by Thursday

Dave, All –

I'm very pleased that Ecology is setting up this meeting, { **Ex. 6 - Personal Privacy** } Just a few big picture words on the science. While some may be frustrated with how long it's taken to get to this point, the modeling work done by Ecology and PNNL is extraordinary in my opinion. Puget Sound models are extremely difficult to build because of the variation in the system (shallows, deeps, mud flats, sharp corners, sills, islands, etc.). I'm amazed what they have accomplished on a relatively small budget in comparison to similar endeavors for other major waterbodies, e.g., Great Lakes, Chesapeake.

They've also done a outstanding work in building scenarios - estimating natural conditions, future population-related loadings, ocean trends, climate change...etc.

This doesn't mean there aren't uncertainties and limitations. There are, and I'd encourage you to grill the modelers these issues. This is not the end of the science effort...but getting to this point is a really important milestone.

-BC

**From:** Ragsdale, Dave (ECY) [mailto:RAGS461@ECY.WA.GOV]  
**Sent:** Tuesday, June 04, 2013 9:56 AM  
**To:** Croxton, Dave; Mann, Laurie; Henszey, Jo; Cope, Ben  
**Cc:** Eaton, Thomas; Wilcox, Michelle; akol461@ecy.wa.gov; hbre461@ECY.WA.GOV

**Subject:** Ecology meeting on Puget Sound DO studies June 20th 1-3 pm? - Response requested by Thursday

Dave, Laurie and all. I've just spoken with Andrew and strongly agree we should have an Ecology/EPA briefing on the status of some important Puget Sound modeling/TMDL work.

This meeting would include a technical presentation from Ecology-EAP modelers about their findings regarding the pollutant loading causing low dissolved oxygen in the Sound. Follow-up discussion should also be informative (if short, given a two hour meeting) and hopefully clarify EPA expectations for Ecology as they get closer to finishing up the Deschutes/Budd Inlet TMDL.

I hope this time works for you, we can set up conference call line and email the presentations in advance it helps your schedule by not having to drive to Olympia. The three required EPA staff for this meeting are Dave C, Laurie and myself... but I hope the rest of you can participate. Please respond by this Thursday whether this time/date works for you.

Thanks. Dave R.

**From:** Kolosseus, Andrew (ECY)  
**Sent:** Tuesday, June 04, 2013 9:44 AM  
**To:** Ragsdale, Dave (ECY)  
**Subject:** FW: EPA - Ecology meeting on Puget Sound DO studies

June 20<sup>th</sup> 1-3 pm. Will this work for a quorum of EPA folks?

Andrew Kolosseus  
Washington State Dept. of Ecology  
PO Box 47600  
Olympia, WA 98504-7600  
(360) 407-7543

**From:** Kolosseus, Andrew (ECY)  
**Sent:** Friday, May 31, 2013 1:33 PM  
**To:** 'Mann, Laurie'  
**Subject:** RE: EPA - Ecology meeting on Puget Sound DO studies

Laurie –

How about later on June 20? We could get a one-hour block for most Ecology people anytime between 12 and 3. Any other day in June and our available drops off dramatically. Ben is pretty up-to-speed on at least one the three projects, so perhaps we can meet with him separately.

--Andrew

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PO Box 47600  
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(360) 407-7543

**From:** Mann, Laurie [<mailto:mann.laurie@epa.gov>]  
**Sent:** Friday, May 31, 2013 9:27 AM  
**To:** Kolosseus, Andrew (ECY); Cope, Ben  
**Subject:** RE: EPA - Ecology meeting on Puget Sound DO studies

Hi Andrew,

Ragsdale's electronic calendar is completely empty (he doesn't use it, I suspect). When I find out when he is back in the office I'll let you know (I'm fairly sure he'll be back long before June 20<sup>th</sup>). Unfortunately, Ben is out of the office the week of your proposed meeting (and returns

June 30<sup>th</sup>). Croxton and I are currently booked for that morning, although it's possible one or both of us could reschedule our existing meetings.

I do think it's important that one EPA person besides Ragsdale be at the meeting, since Ragsdale may not be around to finish up these projects. I'll connect with my boss to try to figure out who might be the person working on these projects Ex. 6 - Personal Privacy ..I'll let you know!

Thanks,

Laurie

**Laurie Mann** | Environmental Engineer

**U.S. Environmental Protection Agency** | Region 10

P: (206) 553.1583 | [mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)

Follow @EPAnorthwest on Twitter! <https://twitter.com/EPAnorthwest>

**From:** Kolosseus, Andrew (ECY) [<mailto:AKOL461@ECY.WA.GOV>]

**Sent:** Thursday, May 30, 2013 4:27 PM

**To:** Mann, Laurie; Cope, Ben

**Subject:** FW: EPA - Ecology meeting on Puget Sound DO studies

Laurie and Ben –

I'm trying to schedule an EPA-Ecology meeting through Dave, but it looks like he is out of the office. See message below. Any chance June 20 at 11am would work for you? (And can you see Dave's calendar for his availability? I can't....)

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(360) 407-7543

**From:** Kolosseus, Andrew (ECY)  
**Sent:** Thursday, May 30, 2013 4:19 PM  
**To:** Ragsdale, Dave (ECY)  
**Cc:** [ragdsdale.dave@epa.gov](mailto:ragdsdale.dave@epa.gov); Wagner, Lydia (ECY); Roberts, Mindy (ECY)  
**Subject:** EPA - Ecology meeting on Puget Sound DO studies

Dave –

We'd like to schedule a meeting to talk with EPA about our three Puget Sound DO projects (Budd Inlet, South Puget Sound Dissolved Oxygen Study, and the Puget Sound Dissolved Oxygen Model). We'd talk about our model results to-date, schedules, and next steps.

Unfortunately, scheduling will be tough. Over the next month, the best time for us is Thursday, June 20<sup>th</sup> at 11:00. Any chance it would work for you and a minimum quorum of EPA folks (Ben, Laurie, Croxton – whoever you think should be there)? From our end we'll have Mindy and possibly more of the modeling team, Zentner, Kim, Melissa, Kelly, Lydia, and me.

Let me know if that time would work. Otherwise we'll find a plan B time.

--Andrew



Andrew Kolosseus  
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Olympia, WA 98504-7600  
(360) 407-7543

**To:** Zell, Christopher[zell.christopher@epa.gov]  
**From:** Croxton, Dave  
**Sent:** Wed 9/7/2016 11:00:53 PM  
**Subject:** RE: INTERNAL and DELIBERATIVE - Deschutes Proposal(s)

Good summary Chris. I don't have any particular comments and agree with your conclusions.

**From:** Zell, Christopher  
**Sent:** Wednesday, September 07, 2016 1:46 PM  
**To:** Byrne, Jennifer <Byrne.Jennifer@epa.gov>; Mann, Laurie <mann.laurie@epa.gov>; Croxton, Dave <Croxton.David@epa.gov>  
**Subject:** INTERNAL and DELIBERATIVE - Deschutes Proposal(s)

Good Afternoon,

Thank you for a great conversation yesterday. As requested during our meeting, I further investigated the viability of approving a smaller subset of waters and pollutants described by Andrew in the preceding email. The summary of my evaluation is included below for your consideration.

**Ecology's Preferred Option** - EPA approves the entire TMDL as submitted in December 2015.

-

#### EPA Response

## Ex. 5 - Attorney Client

**Ecology's Secondary Option** - EPA partially approves the TMDL that Ecology submitted. EPA approves the TMDL for temperature on the Deschutes River below river km 45 (downstream of Offutt Lake where the criteria is 17.5 degrees and above the natural condition) {this tentatively includes listings 6576, 48711, and 48713}.

- Fine sediment

- pH
- Bacteria

#### EPA Evaluation

#### Temperature Segments below Offutt Lake

**Ex. 5 - Attorney Client**

#### Fine Sediment

**Ex. 5 - Attorney Client**

#### pH

**Ex. 5 - Attorney Client**

# **Ex. 5 - Attorney Client**

*Adams, Ayer, and Black Lake Ditch*

# **Ex. 5 - Attorney Client**

*Deschutes River segment 9438*

# **Ex. 5 - Attorney Client**

Bacteria

# **Ex. 5 - Attorney Client**

# Ex. 5 - Attorney Client

## Conclusions

# Ex. 5 - Attorney Client

I look forward to your thoughts and guidance!

Chris

**From:** Zell, Christopher

**Sent:** Thursday, September 01, 2016 5:05 PM

**To:** Croxton, Dave <[Croxton.David@epa.gov](mailto:Croxton.David@epa.gov)>  
**Cc:** Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** FW: Discuss Deschutes Proposal(s)

Hi Dave,

Please see below. Would you like to join our call tomorrow? It is scheduled from 10 am to noon.

Thanks!

Chris

**From:** Kolosseus, Andrew (ECY) [<mailto:AKOL461@ECY.WA.GOV>]  
**Sent:** Thursday, September 01, 2016 4:58 PM  
**To:** Zell, Christopher <[zell.christopher@epa.gov](mailto:zell.christopher@epa.gov)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** RE: Discuss Deschutes Proposal(s)

Chris and Laurie:

Here are my two options for our discussion tomorrow. I have shared the secondary option with Rich Doenges, my boss, but not anyone else within Ecology management. So that's an important caveat. I know that Rich had significant concerns with some of it (he's definitely pushing from the preferred option), so he might attend part of the meeting tomorrow. We are very interested in any ideas that you might have moving forward (sounded like you've had discussions but nothing written yet – any ideas you can share at the meeting?).

Andrew

### **Preferred Option:**

EPA approves the entire TMDL as submitted in December 2015. Ecology began work on this TMDL in 2003, and EPA was engaged in the process the entire time. Multiple EPA staff commented on draft versions of the TMDL and significant changes were made in good faith to address EPA's comments. Ecology engaged the tribe and stakeholders to finish this TMDL, and gained a remarkable amount of support given the complexity of the problem. The TMDL was a 12 year effort, and includes 75 foot buffers to increase shade, the most important factor related to temperature, dissolved oxygen, and pH. The TMDL also addresses bacteria and – at the request of Squaxin Island Tribe – fine sediment. The Deschutes TMDL is a priority in EPA's WQ measure 27. Approval of the TMDL will focus energy on implementation on the TMDL and the next phase of work in the watershed, Budd Inlet.

### **Secondary Option:**

EPA partially approves the TMDL that Ecology submitted. EPA approves the TMDL for:

- Temperature on the Deschutes River below river km 45 (downstream of Offutt Lake where the criteria is 17.5 degrees and above the natural condition) {this tentatively includes listings 6576, 48711, and 48713}
- Fine sediment
- pH
- Bacteria

EPA takes no action on the dissolved oxygen and remaining temperature listings. This approach maintains the implementation plan that will be used by stakeholders and permittees to improve water quality in the basin, minimizes the amount of non-value-added work for all parties involved, and focuses approval on the least controversial listings.

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**From:** Zell, Christopher [<mailto:zell.christopher@epa.gov>]  
**Sent:** Thursday, September 01, 2016 9:07 AM  
**To:** Kolosseus, Andrew (ECY) <[AKOL461@ECY.WA.GOV](mailto:AKOL461@ECY.WA.GOV)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** RE: Discuss Deschutes Proposal(s)

Good Morning Andrew,

I was out all last week and am still catching up. We met a few weeks ago to discuss potential options for moving forward. It's not clear to me we have identified solid options for moving forward just yet that would not require some rework. Additional conversations are planned. Looking forward to our call tomorrow and hope you are well!

Chris

**From:** Kolosseus, Andrew (ECY) [<mailto:AKOL461@ECY.WA.GOV>]  
**Sent:** Thursday, September 01, 2016 8:54 AM  
**To:** Zell, Christopher <[zell.christopher@epa.gov](mailto:zell.christopher@epa.gov)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** RE: Discuss Deschutes Proposal(s)

Chris and Laurie:

Re-pinging on the e-mail below, and wanting to figure out details for tomorrow's meeting. I have a written proposal that I can share with you – either via e-mail if it's a phone meeting or you can look at my copy if we meet in person. What I am proposing is fairly straight-forward and could probably be adequately explained over the phone.



And Laurie, did you get a call from Nancy regarding Lower White River? It sounds like they are approved to discuss an option with us in mid-September and will begin writing something. While I don't know the details, I'm inferring from Nancy's non-answers to some of my questions that their option may not be something we would support. I am desperately hoping that I'm wrong.

Andrew

Andrew Kolosseus  
Washington State Dept. of Ecology  
PO Box 47775  
Olympia, WA 98504-7775  
(360) 407-7543

**From:** Kolosseus, Andrew (ECY)  
**Sent:** Tuesday, August 23, 2016 4:09 PM  
**To:** 'Zell, Christopher' <[zell.christopher@epa.gov](mailto:zell.christopher@epa.gov)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** RE: Discuss Deschutes Proposal(s)

Good afternoon:

Hope everyone is enjoying our nice summer weather – August here is better than the Midwest! To make sure we keep moving, here's the status as I see it.

- Any luck with the bacteria CFU translator proposal or a counter-proposal? Will you have something to discuss on this topic by Sept. 2?

- We'll meet on the 2<sup>nd</sup> – I'll share my multiple proposals for moving forward. EPA will share yours later in September as per Chris's e-mail below. Do you have a date for that?

• Kelly Susewind met with Jeff sometime recently. I've only heard the outcome second hand, but the short summary is there was nothing substantive. Was Dan O. going to check in with Kelly or Jeff?

Anything else?

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PO Box 47775  
Olympia, WA 98504-7775  
(360) 407-7543

**From:** Zell, Christopher [<mailto:zell.christopher@epa.gov>]  
**Sent:** Wednesday, August 10, 2016 8:36 AM  
**To:** Kolosseus, Andrew (ECY) <[AKOL461@ECY.WA.GOV](mailto:AKOL461@ECY.WA.GOV)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>  
**Subject:** RE: Discuss Deschutes Proposal(s)

Sounds great Andrew, looking forward to our chat on September 2<sup>nd</sup>! ☺

Best,

Chris

**From:** Kolosseus, Andrew (ECY) [<mailto:AKOL461@ECY.WA.GOV>]  
**Sent:** Tuesday, August 09, 2016 2:24 PM  
**To:** Zell, Christopher <[zell.christopher@epa.gov](mailto:zell.christopher@epa.gov)>; Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>

**Subject:** RE: Discuss Deschutes Proposal(s)

Chris:

Thanks for the e-mail. Let's keep our September 2 meeting as a check-in phone call. Let's also set up another meeting in September by which time we all commit to resolving the bacteria issue and identifying proposals. I'll let you pick the date – I'm generally available any time after the 12<sup>th</sup>.

From a previous e-mail:

2. Develop potential solutions for all eight items (e.g. 5 buckets). Everything done except for bacteria CFU translator. EPA will either okay my proposal or counter-proposal. Andrew commits EPA to completing bacteria issues by the end of the month.
3. Laurie's idea of everyone coming up with multiple proposals (at least two) for an overall approach to moving forward on the TMDL. Proposals cover what we'll do for each parameter/listing. We set a meeting for Friday, Sept 2 from 10-12. We will strive to have sharable proposals by then, or share what we have, or postpone the meeting if necessary.

Andrew

Andrew Kolosseus  
Washington State Dept. of Ecology  
PO Box 47775  
Olympia, WA 98504-7775  
(360) 407-7543

**From:** Zell, Christopher [<mailto:zell.christopher@epa.gov>]  
**Sent:** Tuesday, August 09, 2016 12:50 PM

**To:** Mann, Laurie <[mann.laurie@epa.gov](mailto:mann.laurie@epa.gov)>; Kolosseus, Andrew (ECY) <[AKOL461@ECY.WA.GOV](mailto:AKOL461@ECY.WA.GOV)>  
**Subject:** Discuss Deschutes Proposal(s)

Hi Andrew,

Hope you had a great weekend!

Could we move our discussion into September? In reviewing schedules and review timelines, it occurred to me that identifying definitive proposal(s) by late August might be challenging. We can keep this date to update each other if that makes sense. What are your thoughts?

Best,

Chris

## Meeting Purpose

- Actions for moving forward with the Deschutes TMDL
- Summary of TMDL issues and Agency viewpoints
- Review Path Forward Discussed with Ecology during 1/10/2017 meeting in Lacey, WA

## Project Background

Ecology submitted the final Phase 1 Deschutes TMDL to EPA for approval on December 17, 2015. The submitted TMDL package included a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment).

Ex. 5 - Deliberative Process

# Ex. 5 - Deliberative Process

# Ex. 5 - Deliberative Process

## Actions for Moving Forward

40 CFR 130.7(d)(2): “The Regional Administrator shall either approve or disapprove such listing and loadings not later than 30 days after the date of submission....”

# Ex. 5 - Deliberative Process

**Ex. 5 - Deliberative Process**

**REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)**

**Summary of TMDL Issues and Viewpoints**

The WU has itemized TMDL issues and viewpoints in the table below to assist management conversations with Ecology.

# Ex. 5 - Deliberative Process

## A Path Forward

EPA (CZ, DC) and Ecology (SWRO) met on 1/10/2017 in Lacey, WA to discuss a path forward.

# Ex. 5 - Deliberative Process

Next Steps identified during the meeting include: (1) independent respective staff briefings of Heather and Dan regarding Options, and (2) follow-up meeting (planned for 2/17) with Dan, Heather, and respective staff to confirm path forward (if needed). (3) Could contact NWEA and SIT



**REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)**

## Meeting Purpose

- Actions for moving forward with the Deschutes TMDL
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Ex. 5 - Deliberative Process

## Ex. 5 - Deliberative Process

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# Ex. 5 - Deliberative Process

**Ex. 5 - Deliberative Process**

REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)

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# Ex. 5 - Deliberative Process

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**REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)**

## Meeting Purpose

- Actions for moving forward with the Deschutes TMDL
- Summary of TMDL issues and Agency viewpoints
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Ex. 5 - Deliberative Process

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

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40 CFR 130.7(d)(2): “The Regional Administrator shall either approve or disapprove such listing and loadings not later than 30 days after the date of submission...”

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**



**REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)**

**Summary of TMDL Issues and Viewpoints**

The WU has itemized TMDL issues and viewpoints in the table below to assist management conversations with Ecology.

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## A Path Forward

EPA (CZ, DC) and Ecology (SWRO) met on 1/10/2017 in Lacey, WA to discuss a path forward.

# Ex. 5 - Deliberative Process

Next Steps identified during the meeting include: (1) independent respective staff briefings of Heather and Dan regarding Options, and (2) follow-up meeting (planned for 2/17) with Dan, Heather, and respective staff to confirm path forward (if needed). (3) Could contact NWEA and SIT

**REGION 10 OWW TOPIC BRIEFING – Deschutes River TMDL (WA)**

## **DRAFT BRIEFING FOR DAN**

### **TRIBAL CONSULTATION AND REVIEW UPDATE FOR DESCHUTES TOTAL MAXIMUM DAILY LOAD (TMDL), THURSTON COUNTY, WASHINGTON**

#### **Meeting Purpose**

Provide background information and update Dan on the following:

- Status of EPA TMDL Review;
- Squaxin Island Tribe TMDL Concerns; and
- Options for Moving Forward

#### **Project Background**

The Deschutes River, Percival Creek, and Budd Inlet Tributaries (Phase 1) TMDL study area (186 mi<sup>2</sup>) is located in south Puget Sound and is situated within the boundaries of Thurston and Lewis Counties, Washington. The study area includes the major cities or towns of Olympia, Lacey, Tumwater, and Rainier. Significant data collection to support the Phase 1 TMDL began in 2003. Data analysis and modeling concluded in 2012. On December 17, 2015, Ecology submitted the final Phase 1 TMDL to EPA for approval. The submitted TMDL package includes a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment). EPA understands that Ecology is developing a TMDL for Budd Inlet and Capitol Lake as Phase 2 of the Deschutes TMDL. According to the timeline shared with EPA in March 2016, Ecology is tentatively planning to submit the Phase 2 TMDL for approval in June 2019.

## **Ex. 5 - Deliberative Process**

#### **Quick Facts**

- ✓ Ecology is seeking approval for TMDLs that span 71 segments
- ✓ Category 5 impairments: water temperature, DO, pH, fecal coliform bacteria, and fine sediment
- ✓ Category 4C pollution: in-stream flows and large woody debris
- ✓ TMDL split into two phases given technical complexity and political ramifications related to Capitol Lake and Budd Inlet impairments
- ✓ Surrogates are proposed for 4 of 5 pollutants
- ✓ The TMDL seeks to achieve temperature, DO, and pH water quality standards through increased stream shading
- ✓ Ecology predicts that WQS for temperature, DO, and pH will be achieved by 2065.

- ✓ Permittees include: 5 municipal stormwater-MS4s, 7 sand & gravel, 9 industrial stormwater, and 25+ construction stormwater. The boundary of the Phase 1 TMDL does not include wastewater treatment point sources. Phase 2 of the TMDL will include the LOTT regional wastewater facility that serves south Puget Sound.

## **Ex. 5 - Deliberative Process**

Status of Phase 1 TMDL Review

## **Ex. 5 - Deliberative Process**

# **Ex. 5 - Deliberative Process**

**Squaxin Island Tribe Concerns**

# **Ex. 5 - Deliberative Process**

requested the following agenda items be including during our consultation meeting scheduled for June 30<sup>th</sup>, 2016:

---

**“ River Flow**

- Decreasing flows of the Deschutes River
- River flow in the Ecology’s Deschutes River temperature modeling

**Ex. 5 - Deliberative Process**

- Actions to be taken.

**Riparian Shade**

- **Ex. 5 - Deliberative Process**
- Scale of the Deschutes River (flow, channel, and valley) relative to a 75 ft riparian buffer.
- Large woody debris as target allocations.
- Actions to be taken.

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

**Ex. 5 - Deliberative Process**

In addition, SIT included the following in their public notice comments:

“The Clean Water Act does not allow Ecology to draw a bright line between its water quality and quantity programs. Rather, the Act requires “comprehensive solutions” to prevent, reduce and eliminate pollution in concert with programs for managing water; and (2) establishes the supreme goal of restoring and maintaining the chemical, physical, and biological integrity of the Nation’s waters. Drawing a bright line is a prohibited “artificial distinction.” PUD No. 1 v. Ecology, 511 U.S. 700, 719 (1994).”

**Ex. 5 - Deliberative Process**

# **Ex. 5 - Attorney Client**



**To:** Mann, Laurie[mann.laurie@epa.gov]  
**From:** Henszey, Jo  
**Sent:** Fri 11/21/2014 4:27:36 PM  
**Subject:** FW: Tomorrow's Deschutes Meeting  
SIT-FW-RevCommentsNov14.xlsx

FYI, Our call's from 10am to 11:30 am this morning.

I really enjoyed spending time with you yesterday, both personally and professionally.

Thanks,

Jo

**From:** Wagner, Lydia (ECY) [mailto:LBLA461@ECY.WA.GOV]  
**Sent:** Friday, November 21, 2014 7:53 AM  
**To:** Henszey, Jo  
**Cc:** akol461@ecy.wa.gov; Bilhimer, Dustin (ECY)  
**Subject:** RE: Tomorrow's Deschutes Meeting

Hi Jo,

Here's the number:

Ex. 6 - Personal Privacy

Also, attached are the comments received by the SIT.

Lydia

**From:** Henszey, Jo [mailto:Henszey.Jo@epa.gov]  
**Sent:** Thursday, November 20, 2014 5:23 PM  
**To:** Wagner, Lydia (ECY)

**Cc:** Kolosseus, Andrew (ECY)

**Subject:** Tomorrow's Deschutes Meeting

Hi Lydia,

Do you have a call in number for tomorrow's meeting? Laurie and I will both be calling in.

Thanks,

Jo

Jo Henszey

Governmental Liaison

Washington Operations Office

USEPA, Region 10

360-753-9469

**To:** Croxton, Dave[Croxton.David@epa.gov]; Zell, Christopher[zell.christopher@epa.gov]  
**Cc:** Mann, Laurie[mann.laurie@epa.gov]; Edmondson, Lucy[Edmondson.Lucy@epa.gov]  
**From:** Henszey, Jo  
**Sent:** Fri 1/15/2016 7:25:52 PM  
**Subject:** Deschutes TMDL  
SquaxinComents\_DeschutesTMDL\_052715.xlsx

Hi Dave & Chris,

Very sorry I did not get back to you sooner. I am in the process of organizing files, etc. and will try to get the Deschutes files to Chris ASAP. We did not send an “official” tribal consultation letter to the Squaxin Island Tribe (SIT). We did however discuss this TMDL with Jeff Dickenson and Erika Marbet when we met with them regarding WA’s Draft Nonpoint Plan. As you may recall, Jeff indicated the tribe was prepared to file legal action against EPA on this TMDL. In advance of the complete set of files, I am attaching the official SIT comments submitted to Ecology on this plan.

Chris, et al. please do not hesitate to contact me if you have any questions or if I can help in any way. My cell phone number is (Ex. 6 - Personal Privacy)

Best,

Jo

Jo Henszey

Governmental Liaison

Washington Operations Office

USEPA, Region 10

360-753-9469